A

Abbs SJ, 673
Abeck D, 894
Açil Y, 617
Adzick NS, 375
Ahmad W, 281
Ahn SK, 189
Aho S, 422
Akaboshi M, 26
Akagi A, 246
Akdis CA, 628
Akdis M, 628
Alanko T, 111
Alard P, 983
Alcorn D, 740
Alitalo K, 1047
Altieri DC, 1076
Altmeyer P, 821
Amano S, 38
Anand-Apte B, 838
Anant S, 162
Anderson RR, 293
Andersson M, 533
Anker M, 954
Ansel JC, 766
Aoki H, 258
Appel D, 788
Aragane Y, 182
Arbiser JL, 838
Arguello JR, 322
Ariotti S, 238
Asada Y, 308
Asahina A, 1021
Ashton GHS, 314, 673, 940
Asti L, 760
Athar M, 1070
Audring H, 554
Aurelian L, 808
Austin LM, 752

B

Baba T, 856
Babcock GF, 725
Bachelez H, 286
Bäckman A, 152
Baggiolini M, 43
Balendran N, 322
Bales ES, 1039
Banauda K, 364
Banaudha KK, 773
Bandyopadhyay D, 1039
Bao S, 1059
Barber R, 322
Barker JNWN, 322
Barnes MR, 1119
Barros-Núñez P, 954
Bass G, 788
Bastian BC, 1065
Bataille VA, 901
Bätge B, 617
Beck NE, 901
Becker JC, 1033
Beleta J, 82
Bellmann B, 554
Bergman R, 687
Bettencourt M, 788
Bickers DR, 1070
Bikle DD, 340
Binder BR, 32
Birch-Machin MA, 607, 972
Blaschke V, 658
Blaser K, 628
Bleck O, 894
Bloomer J, 87
Bodmer WF, 901
Boggess D, 61
Boissy RE, 725
Boissy YL, 960
Boorsma DM, 574
Borg-Von Zepelin M, 747
Bornstein P, 782
Botchkarev VA, 425, 691, 878
Botchkareva NV, 425, 878
Bouwstra JA, 403
Bowden PE, 1123
Braathen LR, 43, 711
Brancaleon L, 977
Brandt O, 894
Brash DE, 283
Brattsand M, 152
Braungart E, 69
Braunwalder J, 43
Brem G, 967
Brinckmann J, 617
Briviba K, 335
Bröcker E-B, 117, 140, 947, 1033
Brown LF, 1047
Brown TL, 725
Brown TJ, 740
Bruckner-Tuderman L, 133, 419, 947
Bruijnzeel-Koomen CAFM, 4
Bruynzeel DP, 574
Bunker CB, 693
Burbach GJ, 766
Burgeson RE, 38
Burnett J, 808
Byers HR, 651
Byrne C, 1106

C

Cabal-Manzano R, 398
Cadoni S, 622
Callen JP, 117
Camp RDR, 355
Campton K, 999
Cannon G, 766
Cantú JM, 954
Cao H, 928
Carter EL, 139
Castagnoli C, 238
Caughman SW, 766
Caux F, 117
Celebi JT, 848
Celis JE, 162
Cesinaro AM, 415
Chang-Yi C, 182
Chen G, 49
Chimanovitch I, 140, 947
Chiodino C, 415
Choi EH, 189
Chorzelski TP, 146
Christiano AM, 281
Chuong CM, 230
Cichon S, 954
Cifone MG, 98
Cinque B, 98
Clark BC, 277
Clark RAF, 913
Clark RD, 263
Clough RL, 322
Cohen N, 687
Collins JE, 162
Conrad N, 1039
Cook PW, 860
Cooper KD, 49
Coors EA, 170
Copeland P, 392
Cornelius J, 725
Corsini E, 760
Crameri R, 156
Crombleholme TM, 375
Cross CE, 1128
Crumrine Y, 788
Crystal RG, 999

D

Dam Tomas N, 1082
Das Pranab K, 725
Davidson NO, 162
De Bernardo C, 424
De Gruijl FR, 4
De Pità O, 622
De Simone C, 98
Degitz K, 69
Deleo VA, 87
Dellavalle RP, 146
Detmar M, 1047
Dewald B, 43
Dezube BJ, 1047
Di Mazio L, 98
Diaz LA, 117, 947
Dibbert B, 628
Didenko V, 1039
Dietrich C, 1039
Dietriech W, 133
Ding W, 999
Disch R, 628
Doering T, 329
Döpp R, 140
Dopping-Hepenstal PJC, 940, 1119
Dormoy A, 175
Douwes K, 69
Dove-Edwin I, 901
Dubertret L, 286
Dumanski JP, 162
Dunham I, 162

E

Eady Robin AJ, 1119, 314, 673, 940
Ebihara T, 906
Egbert TB, 146
Egelrud T, 152
Eibenschutz L, 424
Eichmüller S, 523
Ekwall O, 1054
El Gammal C, 821
El Gammal S, 821
Elias K, 788
Elias PM, 796
Elliot K, 873
Engblom J, 533
Engel P, 11
Engelsma-Van Pelt AM, 403
Ertle V, 587
Ermert H, 821
Erno H, 643
Esche C, 1028
Ewen SWB, 392

F

Fantini F, 415
Farr PM, 346
Fartasch M, 329
Fatovic-Ferencic S, 861
Feingold ML, 788
Feng X, 913
Fenske S, 554
Ferguson MWJ, 1106
Fietzek PP, 617
Fischer GF, 56
Flanagan N, 972
Flier J, 574
Flynn E, 838
Föhr N, 11
Foitzik K, 523
Forslind B, 533
Frank Stefan, 369, 1090
Fraser JRE, 740
Freyschmidt-Paul P, 61
Friedman R, 788
Friedman-Birnbaum R, 687
Fritsch P, 954
Frossard PM, 687
Fuchs PG, 122
Fuchs T, 214
Fujimoto A, 258
Fukuda S, 1021
Furci L, 613
Furukawa F, 202
Fusenig NE, 384

G

Gachelin G, 286
Gaddipati JP, 773
Galanakis Ds, 913
Galli CL, 760
Ganju RK, 1047
Garlick JA, 384
Gawkrodger DJ, 267
Geiger Me, 32
Georgi M, 947
Germaier H, 587
Geusau A, 613
Ghadially H, 991
Ghali L, 595
Ghanem G, 560
Ghoreishi M, 541
Giannetti A, 415, 920

0022-202X/99/$ 14.00 • Copyright © 1999 by The Society for Investigative Dermatology, Inc.

Gilliam AC, 49
Giménez-Arnau AM, 82
Giménez-Camarasa JM, 82
Girardelli CR, 622
Giudice GJ, 117, 947
Glodstein AL, 364
González S, 293
Gorodetsky R, 732
Grammatico P, 424
Granstein RD, 999
Gratian MJ, 940
Gratzl S, 628
Green H, 1099
Green J, 595
Grichnik JM, 139
Gröger M, 56
Gromov P, 162
Grossman D, 1076
Gruschwitz M, 170
Guerrera V, 107
Guidice GJ, 140
Guikers KLH, 4
Guldberg P, 1033
Gustafsson J, 1054
Guzzo C, 93

H

Hackett NR, 999
Hagenhofer M, 587
Hägg P, 635
Hales JM, 355
Hallier E, 214
Hamm H, 607
Hammami-Hauasli N, 419
Hanada K, 856
Handel-Fernandez ME, 224
Handjiski B, 523
Hanley K, 788
Hanninen L, 983
Hansson L, 152
Happle R, 61
Hardman MJ, 1106
Harvima IT, 567
Harvima RJ, 567
Harwix S, 658
Hasan T, 664
Haschka M, 858
Hashimoto I, 281, 856
Hatta N, 258, 419
Hay I, 392
Haycock JW, 560
He NM, 788
Healy E, 607
Hedstrand H, 1054
Hehlmann R, 587
Heiss S, 830
Helisalmi P, 567
Hengst SD, 4
Henry M, 613
Hentula M, 635
Herlyn M, 375
Hermanns W, 967
Hern S, 127
Herrmann M, 587
Herron GS, 1114
Herzele K, 947
Hillmer AM, 954
Hirota A, 906
Hoffmann R, 61
Hofmann U, 523
Hohenadl C, 587
Holmes SC, 607
Holubar K, 861
Homma Y, 600
Hong WZ, 22
Höpfl R, 122
Hoppe U, 894
Horio T, 802
Horsmanheimo M, 567
Hosoi J, 999
Hsieh SN, 335
Hsieh S-T, 579
Hunter O, 1028
Husain A, 392
Husebye E, 1054
Hwang SM, 189

I

Ibbotson SH, 346
Ichikawa T, 935
Imamura S, 26
Imanzahrai A, 796
Ina S, 856
Irie S, 906, 1021
Irvine AD, 607
Ishibashi A, 246
Ishikawa M, 26
Itai K, 856
Itano N, 935
Itoh T, 251, 802
Iwatsuki K, 600

J

Jablonska S, 146
Jalbert NL, 651
Javaherian A, 384
Jeronimo C, 279
Jeskanen L, 664
Jiang SS, 788
Jiang SJ, 189
Jiang T-X, 230
Jimbow K, 928
Jin XH, 1070
Jones AB, 322
Jorcano JL, 137
Jury CS, 607

K

Kadoya K, 38
Kalina U, 369
Kaminska R, 567
Kämpe O, 1054
Kämpfer H, 369, 1090
Kaneko F, 600
Kang K, 49
Kang S, 1082
Karalis K, 838
Karlen S, 43, 711
Kárpáti S, 133
Kaspar K, 821
Katayama I, 541, 843
Katz HI, 277
Kauffman CL, 279
Kaufman KM, 146
Kaya G, 137
Keane FM, 940
Kelsell DP, 1119
Kemp EH, 267
Kennedy CTC, 1119
Kerkelä E, 664
Kestler HA, 858
Kief A, 691
Kiekens RCM, 4
Kikuchi T, 752
Kimata K, 935
Kind P, 587
Kishi H, 928
Kleinman HK, 364
Knol EF, 4
Knop J, 991
Koerten HK, 403
Koganehira Y, 935
Koike C, 838
Kokuba H, 808
Kolb N, 1090
Kölgen W, 4
Kollias N, 977
Kömüves L, 788, 796
Korge BP, 607
Kosaka H, 77
Kourilsky P, 286
Koyama Y, 906, 1021
Kraft D, 830
Krebs M, 32
Kreyden O, 628
Krueger JG, 752
Kruse R, 954
Kukutsch NA, 170
Kundu RK, 230
Kunsfeld R, 410
Kurata S, 308
Kurimoto I, 224
Kurtz A, 398, 1133
Kurtz L, 87
Kusakabe M, 906
Kusubata M, 906
Kuwaba K, 906
Kvam E, 209
Kwong A, 796
Kyriakides TR, 782

L

Laag E, 133
Labay V, 687
Lahr T, 991
Lakkakorpi J, 635
Lanigan SW, 1123
Largman C, 796
Larkö O, 547
Lazarus G, 93
Lazzarin A, 613
Le Poole IC, 725
Leal E, 954
Leboit PE, 1065
Leccia M-Te, 651
Lechleitner S, 410
Lee LA, 146
Lee SH, 189
Lee-Hwa K, 182
Leib-Mösch C, 587
Leigh IM, 1119
Leiss P, 1039
Lengyel E, 69
Leong PM, 279
Leopold CS, 304
Lesaffre B, 643
Lestringent GG, 687
Letschert M, 658
Levick JR, 127
Li F, 1076
Lichtin A, 87
Liechty KW, 375
Lilly NA, 960
Lin G, 977
Lin L, 1114
Lin W-M, 579
Lindborg M, 156
Ling G, 523
Little A-M, 322
Liu M, 283
Liu Y-H, 230
Lombardi ML, 107
Lombari V, 107
Longley BJ, 139
Lorgin J, 816
Lotze MT, 1028
Lukowsky A, 554
Lusso P, 613

M

MacNeil S, 560
Macginnitie AJ, 162
Macher E, 888
Madrigal A, 322
Madsen P, 162
Maeda A, 182
Maeda T, 77
Magdolen V, 69
Magin TM, 329
Magliacani G, 238
Magnusson CGM, 156
Maheshwari RK, 364, 773
Mahoney MG, 22, 422
Maibach HI, 304
Mainguy G, 643
Majzoub JA, 838
Malher V, 830
Malinda KM, 364
Maliszewski C, 1028
Mallon E, 693
Mani H, 364
Manzo C, 107
Marchbank A, 146
Marconi A, 920
Maresca V, 424
Marinkovich MP, 1114
Marinovich M, 760
Marschall C, 69
Marshall JL, 960
Martínez F, 285
Martuza RL, 398, 1133
Mascaro Jr JM, 117, 947
Mashour GA, 398, 1133
Mathew CG, 673
Matsubara Y, 906
Matsui M, 26
Maurer M, 523, 878
Mauro T, 796
Maxson RE, 230
Mcelwee KJ, 61
Mcgrath JA, 281, 314, 673, 940
Mckeon F, 1099
Mckillop K, 960
Mcmillan JR, 314
Mcniff JM, 1076
Mecklenburg L, 523
Medrano EE, 1039
Mellerio JE, 314, 673
Mellor R, 127
Menezes DW, 272
Meng X, 856
Mercuro O, 107
Messenger AG, 607, 873
Messer G, 140
Messeritsch-Fanta C, 410
Metz M, 425
Metz S, 61
Meyer I 747
Michael EJ, 848
Michaëlsson G, 1054
Middel P, 658
Millán JM, 285
Miller SJ, 279
Millesimo M, 238
Milz S, 967
Min J, 788

Minami H, 77
Mitchell TA, 93
Miyachi Y, 26
Mizuno K, 802
Mizushima Y, 843
Mohammedi R, 673
Moll R, 691
Monod M, 747
Monteiro MR, 272
Montesinos ML, 643
Moore L, 1106
Morandini R, 560
Moresi JM, 279
Mori T, 251
Moriwaki S, 202
Morrow JD, 93
Mortimer PS, 127
Moulon C, 175
Mühl H, 369
Müller M, 214
Müller PK, 617
Müller-Röver S, 523
Munro CS, 607
Murphy GF, 272
Musette P, 286
Musso T, 238

N

Nagai Y, 246
Nagano T, 972
Naik Shubhada M, 766
Nakamura K, 288, 350, 1021
Narducci MG, 622
Nasca MR, 720
Naukkarinen A, 567
Neitzel H, 1011
Nesbit M, 375
Neumann C, 214, 658
Neumann R, 221
Newson R, 693
Nickoloff BJ, 1082
Niizeki H, 983
Nishigori C, 26
Nishikawa T, 419
Nishioka K, 541, 843
Nishiyama T, 38
Nixon AJ, 865
Noah PW, 427
Nobutoh T, 69
Nomura K, 281
Norlén L, 533
Notbohm H, 617
Nöthen MM, 954
Novelli F, 238

O

O'Toole EA, 720
Oates JA, 93
Oda Y, 340, 796
Ogiolda L, 967
Ohkuba H, 251
Oikarinen A, 664
Okamoto H, 802
Ooi A, 258
Orellana C, 285
Orengo I, 1039
Orfanos CE, 1011
Ormerod AD, 392
Ota M, 928
Ottani D, 415
Oyama N, 600
Ozawa H, 999
Ozawa M, 752

P

Packer L, 1006, 1128
Palacios JM, 82
Palicharla P, 720
Pardinas J, 277
Parimoo S, 277
Parsa R, 1099
Partscht K, 140
Patnaik GK, 773
Paus R, 425, 523, 878
Paus S, 691
Peacocke M, 848
Pearce EG, 1123
Pearson AJ, 865
Peltonen J, 635
Peltonen S, 635
Pereira-Smith O, 1039
Perheentupa J, 1054
Peron J-M, 1028
Perry DAD, 607
Peters EMJ, 878
Petzelbauer P, 56, 410
Pfeilschifter J, 369, 1090
Pfister HJ, 122
Picardo M, 424
Piek C, 821
Piepkorn M, 860
Pierce R, 664
Pihlajaniemi T, 635
Pilgram GSK, 403
Pincelli C, 415, 920
Pinkel D, 1065
Pior J, 888
Pirozzi G, 107
Pistoor F, 175
Pittelkow MR, 860
Poh-Fitzpatrick MB, 87
Polyansky I, 732
Ponzi Alessandro N, 238
Powis SH, 322
Prater CA, 146
Prendes-Garcia MJ, 32
Price V, 277
Prieto F, 285
Prochiantz A, 643
Propping P, 954
Prost C, 117
Puddu P, 622
Pulkkinen L, 1114

Q

Quinn AG, 595, 901

R

Radu A, 375
Rajadhyaksha M, 293
Ranki A, 664
Rasmussen HH, 162
Raudasoja R, 664
Ravarino D, 238
Ray AJ, 972
Rees JL, 607, 972
Reeve VE, 1059
Rehn M, 635
Reich K, 214, 658
Reichelt J, 329
Renner-Müller I, 967
Rennie IG, 560
Reske-Kunz AB, 991
Reunala T, 133
Reuning U, 69
Riecken EO, 133
Rieger A, 613
Rieger N, 967
Rinaldi R, 424
Ring J, 894
Ringk A, 554
Roberts Ii LJ, 93
Roberts J, 277
Rodriguez I, 137
Rogers MA, 263
Rorsman F, 1054
Rosbotham JL, 322
Rosén A, 547
Rosenberg EW, 427
Rosenberg M, 111
Ross R, 991
Ross X-L, 991
Rufaut NW, 865
Ruocco V, 107
Russo G, 622
Ruzicka T, 954
Ryder H, 82

S

Saarialho-Kere U, 664
Sachse F, 658
Saida T, 935
Saksela O, 111
Salas-Alanis JC, 314
Salgado CG, 1021
Sandhoff K, 329
Sanglard D, 747
Santamaria LF, 82
Santella RM, 1070
Sasaki T, 906
Sato K, 77
Satoh T, 541, 935
Sawamura D, 856
Scala E, 622
Schärer J, 43
Scheper RJ, 574
Scheynius A, 156
Schiavo AL, 107
Schindl A, 221
Schmeller W, 617
Schmidt E, 117, 140, 947
Schmidt M, 156
Schmuth M, 954
Schnetz E, 329
Schorle H, 816
Schreiner V, 894
Schulz T, 214
Schumann H, 947
Schuppan D, 133
Schwahn DJ, 1039
Schweiger C, 830
Schweizer J, 263
Schwing J, 991
Seiffert K, 999
Seiter S, 11
Seltmann H, 1011
Seo N, 202
Shapiro SS, 272
Shen J, 1059
Shiga T, 77
Shimizu H, 419
Shioya N, 38
Shurin MR, 1028
Sidhu GS, 364, 773
Sidransky DM, 279
Sies H, 335
Silos-Santiago I, 425
Simon A, 69
Simon D, 628
Simon H-U, 628
Singh AK, 773
Singh SR, 766
Singh S, 928
Skinner RB, 427
Skobe M, 1047
Smith SK, 1123
Smola H, 122
Sonoda T, 308
Sorg C, 888
Spears MJ, 960
Spitzauer S, 830
Sprecher E, 687
Sreekumar GP, 277
Stallmeyer B, 1090
Stamenkovic I, 137
Stanley JR, 22
Stanton AWB, 127
Starcher B, 664
Steiner R, 830
Stella M, 238
Stenhagen G, 547
Stephenson TJ, 873
Sterry W, 554
Stingl G, 287
Stone KJ, 960
Stoof TJ, 574
Strandén P, 152
Straten P thor, 1033
Streilein JW, 224, 983
Strohal R, 287
Stürzl M, 587
Su L-J, 146
Subbotin VM, 1028
Sugaya M, 288, 350, 1021
Sundberg JP, 61
Swale VJ, 901
Swensson O, 314
Swerlick RA, 766
Szargel R, 687

T

Tabata H, 972
Tada Y, 1021
Taguchi H, 77
Tajima S, 246
Takada J, 26
Takafuta T, 272
Takagawa S, 843
Takahashi M, 182
Takata M, 258
Takayama K, 541
Takayasu S, 308
Takeda A, 38
Takehara K, 258
Takigawa M, 202
Talbot D, 816
Tam JWY, 782
Tamai K, 856
Tamaki K, 288, 350, 1021
Tanaka K, 802
Taniguchi S, 935
Tanzi EL, 848
Targoff IN, 146
Tarras-Wahlberg C, 263
Tarras-Wahlberg N, 547
Teich-Alasia S, 238
Telenti A, 747
Tensen CP, 574
Tezuka T, 182
Thiele JJ, 335, 1006, 1128
Thomas HW, 901
Thomas PD, 928

Thomssen R, 747
Tidman N, 595
Tognazzi K, 1047
Tokura Y, 202
Tommerup N, 162
Tonnesen MG, 913
Topf N, 999
Torii H, 999
Torres R, 82
Toyokuni S, 26
Tran Hoang T, 1114
Traupe H, 607
Trembath RC, 322
Trentini GP, 415
Trombotto C, 238
Tronnier M, 617
Tschachler E, 613
Tsuji T, 77
Tsukada T, 906
Tsunenaga M, 38
Tu C-L, 340
Tuukkanen J, 635
Tyrell RM, 209

U

Uchinuma E, 38
Uguccioni M, 43
Uhrin P, 32
Uitto J, 422, 1114
Umeda T, 541
Uthman A, 613

V

Vaalamo M, 664
Vaccariello M, 384
Valenta R, 830
Vales A, 32
Van Beek PJ, 574
Van Der Gaag EJ, 651
Van Der Veen C, 523
Van Vloten WA, 4
Van Weelden H, 4
Vaschieri C, 920
Vassalli P, 137
Veal C, 322
Vexler A, 732
Vietzke J-P, 894
Vincek V, 224
Viswanathan A, 838
Viviani B, 760
Vogl T, 888
Vogt M, 821
Vollmer J, 175
Volovitch M, 643
Von Den Driesch P, 170
Voorhees JJ, 1082
Vorum H, 162

W

Wagner M, 560
Wakita H, 202
Walchner M, 587
Walsh P, 146
Walter JM, 1119
Walters IB, 752
Wang H-L, 398
Wang X, 87
Wang Y, 384
Wang ZY, 1070
Wanke R, 967
Warner RR, 960
Watanabe T, 288
Waterman EA, 267
Watson PF, 267
Webb RH, 293
Weber F, 122
Weber M, 628
Weber SU, 1006, 1128
Weetman AP, 267
Weinlich G, 954
Weissenborn SJ, 122
Wellstein A, 398
Weltzien HU, 175
Wennberg A-M, 547
Wennerström O, 547
Werth VP, 196
Wesselmann U, 117, 1065
West DP, 720
Westphal G, 214
Wheeler JM, 901
Wheeler TT, 865
Whiting D, 277
Whitley P, 156
Whittock NV, 673, 940
Widelitz RB, 230
Wikonkal NM, 283
Wilcox JN, 766
Wilgoss A, 1119
Wilkins RJ, 865
Willemze R, 574
Williams PM, 788
Winter H, 554
Winter H, 263
Wojta J, 32
Wolber R, 894
Wolf E, 967
Wolff K, 56, 410
Wong CQ, 277
Wong ST, 595
Woodley DT, 720
Wright CL, 162
Wu L, 279
Wurst W, 643
Würzner R, 747
Wüthrich B, 628

X

Xu W, 1039

Y

Yagi H, 202
Yamaguchi N, 246
Yamaizumi M, 251
Yamamoto T, 843
Yamashita T, 928
Yang A, 1099
Yang F, 725
Yang L, 87
Yao YJ, 848
Yawalkar N, 43
Ylä-Outinen H, 635
Yokozeki H, 541
Yoshida Y, 49
Yoshikawa K, 77
Yu-Lan P, 182

Z

Zackert WE, 93
Zágoni T, 133
Zanoli S, 920
Zargari A, 156
Zavislan JM, 293
Zetter B, 838
Zeuthen J, 1033
Zhang W, 196
Zhang YJ, 1070
Zhao JF, 1070
Zillikens D, 117, 140, 947
Zipprich S, 214
Zlotogorski A, 277
Zöller M, 11
Zouboulis CC, 1011

A

A431 epidermal keratinocytes, 69
ABCD-1 chemokine, mouse Langerhans cells, 991
Aberrant Cutaneous Expression of the Angiogenic Factor Midkine is Associated With Neurofibromatosis Type-1, Mashour GA, Wang HL, Cabal-Manzano R, Wellstein A, Martuza RL, Kurtz A, 398
Absorption of Hyaluronan Applied to the Surface of Intact Skin, Brown TJ, Alcorn D, Fraser RE, 740
Abstracts
  European Society for Dermatological Research, 1999, 428
  "Minimal Residual Disease in Melanoma" symposium, 1999, 511
  Society for Cutaneous Ultrastructure Research, 1999, 696
  Society for Investigative Dermatology, 1999, 143
Accelerated Wound Healing in Mice with a Disruption of the Thrombospondin 2 Gene, Kyriakides TR, Tam JWY, Bornstein P, 782
Accumulation of Identical T Cells in Melanoma and Vitiligo-Like Leukoderma, Becker JC, Guldberg P, Zeuthen J, Bröcker EB, Straten PT, 1033
Accumulation of Matrilysin (MMP-7) and Macrophage Metalloelastase (MMP-12) in Actinic Damage, Saarilho-Kere U, Kerkelä E, Jeskanen L, Hasan T, Pierce R, Starcher B, Raudasoja R, Ranki A, Oikarinen A, Vaalamo M, 664
Actin bundles, in migrating keratinocytes, 651
Actinic damage, matrix metalloproteinases in, 664
Activator protein-2 *see* AP-2
Addressins, peripheral lymph node, on skin endothelial cells, 410
Adenosine 2b adenosine receptor, 725
Adenoviral-Mediated Overexpression of Platelet-Derived Growth Factor-B Corrects Ischemic Impaired Wound Healing, Liechty KW, Nesbit M, Herlyn M, Radu A, Adzick NS, Crombleholme TM, 375
Adherence, *Candida albicans*, 747
Adherens-type junctions, type XIII collagen, 635
β_2-Adrenoceptors, in hair growth control, 878
Aging, skin viscoelasticity and anisotropy and, 732
AIDS-associated Kaposi's sarcoma, 1047
Alkaline phosphatase, hair follicle morphogenesis and, 523
Allergens
  contact, 888
  Malassezia furfur, 156
  recombinant grass and tree pollen, 830
Allergic contact dermatitis
  chemokine expression, 574
  extracellular matrix components, 906
Allergy, type I, component-resolved diagnosis, 830
Alopecia
  areata
    in autoimmune polyendocrine syndrome type I, 1054
    murine, squaric acid dibutylester therapy, 61
  congenital total, 281, 687, 954
  early onset androgenetic, 277
  male pattern, nexin-1 and, 308
α-Melanocyte-Stimulating Hormone Inhibits NF-κB Activation in Human Melanocytes and Melanoma Cells, Haycock JW, Wagner M, Morandini R, Ghanem G, Rennie IG, Mac Neil S, 560
Altered Gene Expression in Melanocytes Exposed to 4-Tertiary Butyl Phenol (4-TBP): Upregulation of the Adenosine 2b Adenosine Receptor, Le Poole IC, Yang F, Brown TL, Cornelius J, Babcock GF, Das PK, Boissy RE, 725
American Dermatological Association, Carl Heitzmann and, 861
Amiloride, 796
Amphiregulin, overexpressing transgenic mice, 860
Androgens
  control of hair follicle size, 873
  growth hormone interactions, 967
  human sebaceous gland cells and, 1011
  nexin-1 expression and, 308
  serum, in androgenetic alopecia, 277
Angiogenesis
  corticotropin-releasing hormone and, 838
  in Kaposi's sarcoma, 1047
  regulation by fibrin and collagen, 913
  in thrombospondin 2-null mice, 782
  in thymosin β4-treated wounds, 364
Animal model, of systemic sclerosis, 843
Animal Models of Psoriasis, *Letter*, Rosenberg EW, Noah PW, Skinner RB, 427
Anisotropy, skin, 732
Antennapedia, regulation of BPAG1, 643
Antibodies Against Hair Follicles are Associated with Alopecia Totalis in Autoimmune Polyendocrine Syndrome Type I, Hedstrand H, Perheentupa J, Ekwall O, Gustafsson J, Michaëlsson G, Husebye E, Rorsman F, Kämpe O, 1054
Antibodies to Tissue Transglutaminase as Serologic Markers in Patients with Dermatitis Herpetiformis, Dieterich W, Laag E, Bruckner-Tuderman L, Reunala T, Kárpáti S, Zágoni T, Riecken EO, Schuppan D, 133
Antigen-presenting cells, GM-CSF gene transfer, 999
Antioxidants
  cultured melanocytes, phototypes and, 424
  in murine stratum corneum, 1128
AP-2
  α-deficient mice, keratin expression, 816
  induction by inflammatory cytokines, 600
Apobec-1, phorbolin-1 similarity to, 162
Apoptosis
  inhibitor *see* Survivin
  nerve growth factor actions, 920
  nitric oxide effects, 392
  4-tertiary butyl phenol-induced, 725
  transgenic TNF-α induced, 856
  UVB-induced, in epidermal sheets, 802
Arnebin-1 Accelerates Normal and Hydrocortisone-Induced Impaired Wound Healing, Sidhu GS, Singh AK, Banaudha KK, Patnaik GK, Maheshwari RK, 773
Arsenic
  IL-1α induction in keratinocytes, 760
  oxidative DNA damage, 26
Arterioles, in psoriatic plaques, 127
Aspartic proteases, *Candida albicans*, 747
Association of p63 with Proliferative Potential in Normal and Neoplastic Human Keratinocytes, Parsa R, Yang A, McKeon F, Green H, 1099
Atopic dermatitis
  eotaxin and CCR3 expression, 43
  Malassezia furfur allergens, 156
  non-lesional skin, ceramide subfractions, 894
  nonallergic, T cells and cytokines, 628
Atrichia
  congenital, 281
  with papular lesions, 687, 954
Atrichia with Papular Lesions Resulting from a Nonsense Mutation Within the Human Hairless Gene, Sprecher E, Lestringant GG, Szargel R, Bergman R, Labay V, Frossard PM, Friedman-Birnbaum R, Cohen N, 687
Autoantibodies
  hair follicle, 1054
  tyrosinase, 267
Autoantibodies in Lichen Planus Pemphigoides React with a Novel Epitope within the C-Terminal NC16A Domain of BP180, Zillikens D, Caux F, Mascaro JM, Wesselmann U, Schmidt E, Prost C, Callen JP, Bröcker EB, Diaz LA, Giudice GJ, 117
Autoantibodies in a Subgroup of Patients with Linear IgA Disease React with the NC16A Domain of BP180, Zillikens D, Herzele K, Georgi M, Schmidt E, Chimanovitch I, Schumann H, Mascaro JM, Diaz LA, Bruckner-Tuderman L, Bröcker EB, Guidice GJ, 947
Autoantigens
  in chronic ulcerative stomatitis, 146
  endogenous retroviral sequences as, 587
  in lichen planus pemphigoides, 117

0022-202X/99/$ 14.00 • Copyright © 1999 by The Society for Investigative Dermatology, Inc.

in paraneoplastic pemphigus, 422
Autoimmune polyendocrine syndrome type I (APS I, APECED), 1054
Azone, stratum corneum water diffusion rate and, 533

B

B7-1, B7-2, Langerhans cells, 1021
Baldness *see* Alopecia
Barrier Formation in the Human Fetus is Patterned, Hardman MJ, Moore L, Ferguson MWJ, Byrne C, 1106
Barrier function, skin
  Ca^{2+} gradient and transitional cell changes and, 189
  in utero development, nuclear hormone receptors and, 788
  lipid organization and, 403
  measurement of water diffusion, 533
  in non-lesional skin of atopic eczema, 894
Basal cell carcinoma, Gli1 protein expression, 595
Basal Cell Carcinoma-Like Epidermal Changes Overlying Dermatofibromas Often Reveal Loss of Heterozygosity in the PTCH Gene, *Letter* Leong PM, Kauffman CL, Moresi JM, Wu L, Jeronimo C, Sidransky DM, Miller SJ, 279
Basement membrane, laminin 5-promoted formation, 38
Bcl-2, in melanoma, 1076
BCL-2/BCL-x_L, nerve growth factor and, 920
Bikunin, a Serine Protease Inhibitor, is Present on the Cell Boundary of Epidermis, Chang-Yi C, Aragane Y, Maeda A, Yu-Lan P, Takahashi M, Lee-Hwa K, Tezuka T, 182
Bleaching agents, 725
Bleomycin-induced dermal sclerosis, 843
Blistering diseases
  linear IgA disease, 947
  mast cell tryptase and, 567
  see also Epidermolysis bullosa
Blood vessels, in psoriatic plaques, 127
Bone development, hairless protein and, 954
Bowen's disease, arsenic-related, 26
Brain-derived neurotrophic factor transgenic mice, 691
Bromodeoxyuridine labeling, in denervated skin, 579
Bullous pemphigoid antigen 1 (BPAG1), regulation by homeoproteins, 643
Bullous pemphigoid antigen 180 (BP180)
  lichen planus pemphigoides epitope, 117
  linear IgA disease epitopes, 947
  mutations (BPAG2), 1114
  pemphigoid gestationis autoantibodies, 140
Burns, IL-15 in hypertrophic scarring after, 238

C

Café-au-lait macules, 858
Calcitriol, in psoriatic skin xenografts, 1082
Calcium (Ca^{2+})
  epidermal gradient, 189
  intracellular, in keratinocyte differentiation, 340
Calcium chloride ($CaCl_2$), stratum corneum water diffusion rate and, 533
Calcium-sensing receptor, in keratinocyte differentiation, 340
Candida albicans, HIV-protease inhibitors and, 747
Carcinogenesis, arsenic, 26, 760
Carl Heitzmann (1836–1896) and the American Dermatological Association, *Letter*, Holubar K, 861
β-Catenin gene, in extramammary Paget's disease, 258
CCR3, in atopic dermatitis, 43
$CD4^+$ T cells, in mycosis fungoides, 658
$CD7^-$ T helper cells, in cutaneous T cell lymphoma, 622
$CD11b^+$ Cells and Ultraviolet-B-Resistant $CD1a^+$ Cells in Skin of Patients with Polymorphous Light Eruption, Kölgen W, Van Weelden H, Den Hengst S, Guikers KLH, Kiekens RCM, Knol EF, Bruijnzeel-Koomen CAFM, van Vloten WA, de Gruijl FR, 4
$CD11c^+$ dendritic cells, in contact hypersensitivity, 888
$CD34^+$ cells, HHV-8 infection in Kaposi's sarcoma, 613
CD40, Langerhans cells, 1021
CD44
  antisense transgenic mice, 137
  v3 isoform, in delayed-type hypersensitivity, 11
cDNA library, mouse Langerhans cells, 991
Celiac disease, 133
Cell adhesion, type XIII collagen, 635
Cell Interactions Control the Fate of Malignant Keratinocytes in an Organotypic Model of Early Neoplasia, Vaccariello M, Javaherian A, Wang Y, Fusenig NE, Garlick JA, 384
Cellular Fibronectin is Induced in Ultraviolet-Exposed Human Skin and Induces IL-10 Production by Monocytes/Macrophages, Yoshida Y, Kang K, Chen G, Gilliam AC, Cooper KD, 49
Ceramides
  in keratin 10-deficient mice, 329
  Streptococcus thermophilus effects, 98
  subfractions, in atopic dermatitis, 894
The Changes of Epidermal Calcium Gradient and Transitional Cells after Prolonged Occlusion Following Tape Stripping in the Murine Epidermis, Ahn SK, Hwang SM, Jiang SJ, Choi EH, Lee SH, 189
Changes in Ultraviolet Absorption of Sunscreens After Ultraviolet Irradiation, Tarras-Wahlberg N, Stenhagen G, Larkö O, Rosén A, Wennberg AM, Wennerström O, 547
Characterization of an Autoantigen Associated with Chronic Ulcerative Stomatitis: The CUSP Autoantigen is a Member of the p53 Family, Lee LA, Walsh P, Prater CA, Su, LJ, Marchbank A, Egbert TB, Dellavalle RP, Targoff IN, Kaufman KM, Chorzelski TP, Jablonska S, 146
Characterization of the Major Susceptibility Region for Psoriasis at Chromosome 6p21.3, Balendran N, Clough RL, Arguello JR, Barber R, Veal C, Jones AB, Rosbotham JL, Little AM, Madrigal A, Barker JNWN, Powis SH, Trembath RC, 322
Chemokines
  in atopic dermatitis, 43
  in contact dermatitis, 574
  mouse Langerhans cells, 991
Chemotaxis
  $CD4^+$ T cells in mycosis fungoides, 658
  endothelial, 838
Chromosome 6p21.3, psoriasis susceptibility locus, 322
Chromosome abnormalities, in Spitz nevi, 1065
Chymotryptic enzyme, murine stratum corneum, 152
Clk3 kinase, ovine, 865
Clonal patches, p53 immunopositive, 972
Co-stimulatory molecules, Langerhans cells, 1021
Cold sensation, topical local anesthetics and, 304
Collagen
  fluorescence in human skin, 977
  gels, nevus cell survival, 111
  lysyl hydroxylation in lipodermatosclerosis, 617
  regulation of integrins, 913
  type VII gene (COL7A1) mutations, 314, 419, 673
  type XIII, 635
  type XVII
    gene (COL17A1) mutations, 114
    in human skin fibroblasts, 246
    see also Bullous pemphigoid antigen 180 (BP180)
  UV radiation and IL-1α effects, 196
Colorectal cancer, hereditary non-polyposis (HNPCC), 901
Combined Analysis of Polymorphisms of the Tumor Necrosis Factor-α and Interleukin-10 Promoter Regions and Polymorphic Xenobiotic Metabolizing Enzymes in Psoriasis, Reich K, Westphal G, Schulz T, Müller M, Zipprich S, Fuchs T, Hallier E, Neumann C, 214
Common Human Leukocyte Antigen Alleles in Pemphigus Vulgaris and Pemphigus Foliaceus Italian Patients, Lombardi ML, Mercuro O, Ruocco V, Lo Schiavo A, Lombari V, Guerrera V, Pirozzi G, Manzo C, 107
Comparative genomic hybridization, Spitz nevi, 1065
Comparative Mutation Detection Screening of the Type VII Collagen Gene (COL7A1) Using the Protein Truncation Test, Fluorescent Chemical Cleavage of Mismatch, and Conformation Sensitive Gel Electrophoresis, Whittock NV, Ashton GHS, Mohammedi R, Mellerio JE, Mathew CG, Abbs SJ, Eady RAJ, McGrath JA, 673
Component-Resolved Diagnosis (CRD) of Type I Allergy with Recombinant Grass and Tree Pollen Allergens by Skin Testing, Heiss S, Mahler V, Steiner R, Spitzauer S, Schweiger C, Kraft D, Valenta R, 830
Compound Heterozygosity for Novel Splice Site Mutations in the BPAG2/COL17A1 Gene Underlies Generalized Atrophic Benign Epidermolysis Bullosa, Pulkkinen L, Marinkovich MP, Tran HT, Lin L, Herron GS, Uitto J, 1114
Compound Heterozygosity for Silent and Dominant Glycine Substitution Mutations in COL7A1 Leads to a Marked Transient Intracytoplasmic Retention of Procollagen VII and a Moderately Severe Dystrophic

Epidermolysis Bullosa Phenotype, *Letter*, Shimizu H, Hammami-Hauasli N, Hatta N, Nishikawa T, Bruckner-Tuderman L, 419
A Comprehensive Guide for the Recognition and Classification of Distinct Stages of Hair Follicle Morphogenesis, Paus R, Müller-Röver S, van der Veen C, Maurer M, Eichmüller S, Ling G, Hofmann U, Foitzik K, Mecklenburg L, Handjiski B, 523
Confocal scanning laser microscopy, *in vivo*, human skin, 293
Conformation sensitive gel electrophoresis, COL7A1 mutation detection, 673
Connexin 31 (gap junction protein β-3) mutation, 1119
Contact dermatitis
allergic *see* Allergic contact dermatitis
irritant, chemokine expression, 574
Contact hypersensitivity
fluorescein isothiocyanate, 888
genetics in mice, 224
in UVB-susceptible mice, 983
Control of Cutaneous Blood Vessels in Psoriatic Plaques, Hern S, Stanton AWB, Mellor R, Levick JR, Mortimer PS, 127
Correlation Between Antioxidants and Phototypes in Melanocytes Cultures. A Possible Link of Physiologic and Pathologic Relevance, *Letter*, Picardo M, Maresca V, Eibenschutz L, De Bernardo C, Rinaldi R, Grammatico P, 424
Corticosteroids, E-selection expression and, 170
Corticotropin-Releasing Hormone Stimulates Angiogenesis and Epithelial Tumor Growth in the Skin, Arbiser JL, Karalis K, Viswanathan A, Koike C, Anand-Apte B, Flynn E, Zetter B, Majzoub JA, 838
Counterregulation of Interleukin-18 mRNA and Protein Expression During Cutaneous Wound Repair in Mice, Kämpfer H, Kalina U, Mühl H, Pfeilschifter J, Frank S, 369
Cryo-electron diffraction, stratum corneum lipids, 403
CUSP (chronic ulcerative stomatitis protein), 146
Cutaneous Delayed-Type Hypersensitivity Response is Inhibited in Transgenic Mice with Keratinocyte-Specific CD44 Expression Defect, *Letter*, Kaya G, Rodriguez I, Jorcano JL, Vassalli P, Stamenkovic I, 137
Cutaneous lymphocyte-associated antigen (CLA), rolipram and, 82
Cutaneous T cell lymphoma, circulating $CD7^-$ T helper cells, 622
The CXCR3 Activating Chemokines IP-10, Mig, and IP-9 are Expressed in Allergic but not in Irritant Patch Test Reactions, Flier J, Boorsma DM, Bruynzeel DP, van Beek PJ, Stoof TJ, Scheper RJ, Willemze R, Tensen CP, 574
Cyclic AMP (cAMP)
melanoma cell adhesion molecule gene regulation, 711
in T cell-mediated inflammation, 82
Cyclin-dependent kinase inhibitors, in melanoma, 1039
Cyclin E, expression in melanoma, 1039
Cyclosporin
in experimental psoriasis, 1082
Langerhans cell co-stimulatory molecules and, 1021
Cysteaminylphenols, in melanoma, 928
Cytokines
after UVA and UVB irradiation of hairless mice, 1059
effects on Langerhans cells, 1021
gene polymorphisms in psoriasis, 214
induction of AP-2, 600
Langerhans cell migration and, 541
in mycosis fungoides, 658
in nonallergic atopic dermatitis, 628
PUVA-induced Th2 to Th1 shift, 202
type 1, in psoriasis, 752
Cytotoxic T lymphocytes, type 1 (TC1), in psoriasis, 752
Cytotoxicity, nitric oxide in normal skin, 392

D

DDB2 gene, nonsense mutation, 251
Delayed-type hypersensitivity
antiCD44v3 antibodies, 11
in CD44 antisense transgenic mice, 137
in herpes simplex virus-associated erythema multiforme, 808
Dendritic cells
CC chemokine, 991
$CD11c^+$, in contact hypersensitivity, 888
GM-CSF gene transfer, 999
IL-18 and IL-12 upregulation of interferon-γ, 350
regulation by IL-12 and Flt3 ligand, 1028
see also Langerhans cells
Dendrocytes, dermal, GPIbα expression, 272
Denervation, skin, keratinocyte proliferation and, 579
Dermal–epidermal junction, type XIII collagen, 635
Dermal–epidermal separation, by mast cell tryptase, 567
Dermal papilla
cells, nexin-1 expression, 308
control of hair follicle size, 873
Dermal sheath cells, Gli1 protein expression, 595
Dermatitis herpetiformis, tissue transglutaminase antibodies, 133
Dermatofibromas, PTCH loss of heterozygosity, 279
The Description of the Hematoblast by the Dermatopathologist Carl Heitzmann in 1872, *Letter*, Fatovic-Ferencic S, 861
Desmoglein 1, ovine, 865
Desmoplakin mutation, 940
Desquamation, 152, 335
Detection of Melanoma Micrometastases in the Sentinel Lymph Node and in Nonsentinel Nodes by Tyrosinase Polymerase Chain Reaction, Lukowsky A, Bellmann B, Ringk A, Winter H, Audring H, Fenske S, Sterry W, 554
Dexamethasone, Langerhans cell co-stimulatory molecules and, 1021
Differences in Hair Follicle Dermal Papilla Volume are Due to Extracellular Matrix Volume and Cell Number: Implications for the Control of Hair Follicle Size and Androgen Responses, Elliott K, Stephenson TJ, Messenger AG, 873
Differential display, wool follicle genes, 865
Differential Effects of Cytokines and Immunosuppressive Drugs on CD40, B7-1, and B7-2 Expression on Purified Epidermal Langerhans Cells, Salgado CG, Nakamura K, Sugaya M, Tada Y, Asahina A, Fukuda S, Koyama YI, Irie S, Tamaki K, 1021
Differential Regulation of Epidermal and Dermal Dendritic Cells by IL-12 and Flt3 Ligand, Esche C, Subbotin VM, Hunter O, Peron JM, Maliszewski C, Lotze MT, Shurin MR, 1028
Dihydrotestosterone, nexin-1 expression and, 308
1α,25-Dihydroxycholecalciferol and Cyclosporine Suppress Induction and Promote Resolution of Psoriasis in Human Skin Grafts Transplanted on to SCID Mice, Dam TN, Kang S, Nickoloff BJ, Voorhees JJ, 1082
Dimethylbenzanthracene (DMBA), 1133
Dinitrochlorobenzene, 766
2,4-Dinitrofluorobenzene, 906
DNA
oxidative damage, 26, 209
repair defects, in DDB2 gene mutation, 251
DNA polymerase, in herpes simplex virus-associated erythema multiforme, 808
Dose-response curve, PUVA-induced erythema, 346
Drugs
erythema multiforme induced by, 808
transdermal delivery, 740

E

E-cadherin, type XIII collagen and, 635
E-selectin, corticosteroids and, 170
Ectodermal dysplasia, X-linked anhidrotic (hypohidrotic), 285
EDA1 gene, novel mutation, 285
Edema, skin viscoelasticity and anisotropy, 732
Effect of the Lactic Acid Bacterium *Streptococcus thermophilus* on Ceramide Levels in Human Keratinocytes *In Vitro* and Stratum Corneum *In Vivo*, Di Marzio L, Cinque B, De Simone C, Cifone MG, 98
Effect of Superoxide Dismutase on Bleomycin-Induced Dermal Sclerosis: Implications for the Treatment of Systemic Sclerosis, Yamamoto T, Takagawa S, Katayama I, Mizushima Y, Nishioka K, 843
Effects of a Calcium Receptor Activator on the Cellular Response to Calcium in Human Keratinocytes, Tu CL, Oda Y, Bikle DD, 340
Elastin, in actinic damage, 664
Electric field, keratinocyte migration, 851
Electron diffraction provides new information on human stratum corneum lipid organization studied in relation to depth and temperature, Pilgram GSK, Engelsma-van Pelt AM, Bouwstra JA, Koerten HK, 403
Endogenous retroviruses, UVB-mediated activation, 587
Endomysial antibodies, in dermatitis herpetiformis, 133
Endothelial cells
corticotropin-releasing hormone actions, 838
E-cadherin expression, 170
GPIbα expression, 272
immune complex binding in vasculitis, 56

integrins, regulation, 913
peripheral lymph node addressins, 410
Engrailed, regulation of BPAG1, 643
Enhanced Expression of Eotaxin and CCR3 in Atopic Dermatitis, Yawalkar N, Uguccioni M, Schärer J, Braunwalder J, Karlen S, Dewald B, Braathen LR, Baggiolini M, 43
Eotaxin, in atopic dermatitis, 43
Epidermal cells, GM-CSF gene transfer, 999
Epidermal Dysplasia and Abnormal Hair Follicles in Transgenic Mice Overexpressing Homeobox Gene *MSX-2*, Jiang TX, Liu YH, Widelitz RB, Kundu RK, Maxson RE, Chuong CM, 230
Epidermal sheets, UVB-induced apoptosis, 802
Epidermis
bikunin expression, 182
epithelial sodium channels, 796
high-resolution ultrasound, 821
occlusion of tape-stripped, 189
p53 immunopositive clones, 972
p63 protein, 1099
thinning, in skin denervation, 579
tryptophan fluorescence, 977
Epidermodysplasia verruciformis-associated human papillomaviruses, in psoriasis, 122
Epidermolysis bullosa
dystrophic, 314, 419, 673
generalized atrophic benign, 1114
junctional, 314
Epidermolytic hyperkeratosis, stratum corneum changes, 329
Epithelial Sodium Channels are Upregulated During Epidermal Differentiation, Oda Y, Imanzahrai A, Kwong A, Kömüves L, Elias PM, Largman C, Mauro T, 796
Epitope mapping, tyrosinase autoantibodies, 267
erbB-2 Overexpression But No Activation of *β-Catenin* Gene in Extramammary Paget's Disease, Takata M, Fujimoto A, Aoki H, Hatta N, Ooi A, Takehara K, 258
Erythema, PUVA-induced, time-course, 346
Erythema multiforme, HSV- versus drug-associated, 808
Erythrokeratoderma variabilis (EKV), 1119
Erythropoietic protoporphyria, haplotype analysis, 87
Establishment and Characterization of an Immortalized Human Sebaceous Gland Cell Line (SZ95), Zouboulis CC, Seltmann H, Neitzel H, Orfanos CE, 1011
European Society for Dermatological Research, 1999, *Abstracts*, 428
Evaluation of Apoptotic Cells Induced by Ultraviolet Light B Radiation in Epidermal Sheets Stained by the TUNEL Technique, Okamoto H, Mizuno K, Itoh T, Tanaka K, Horio T, 802
Evaluation of Skin Viscoelasticity and Anisotropy by Measurement of Speed of Shear Wave Propagation With Viscoelasticity Skin Analyzer, Vexler A, Polyansky I, Gorodetsky R, 732
Evaporimeter, 533
Expression of the CD4$^+$ Cell-Specific Chemoattractant Interleukin-16 in Mycosis Fungoides, Blaschke V, Reich K, Middel P, Letschert M, Sachse F, Harwix S, Neumann C, 658
Expression of the Novel Inhibitor of Apoptosis Survivin in Normal and Neoplastic Skin, Chiodino C, Cesinaro AM, Ottani D, Fantini F, Giannetti A, Trentini GP, Pincelli C, 415
Expression and Role of IL-15 in Post-Burn Hypertrophic Scars, Castagnoli C, Trombotto C, Ariotti S, Millesimo M, Ravarino D, Magliacani G, Ponzi AN, Stella M, Teich-Alasia S, Novelli F, Musso T, 238
Expression and Targeting of the Apoptosis Inhibitor, Survivin, in Human Melanoma, Grossman D, McNiff JM, Li F, Altieri DC, 1076
Expression of Type XVI Collagen in Human Skin Fibroblasts: Enhanced Expression in Fibrotic Skin Diseases, Akagi A, Tajima S, Ishibashi A, Yamaguchi N, Nagai Y, 246
Extracellular matrix (ECM)
in allergic contact dermatitis, 906
genes, UV radiation effects, 196
regulation of angiogenesis, 913
Eye development, in AP-2α-deficient mice, 816

F

Factor XIIIa-positive dermal dendrocytes, GPIbα expression, 272
Farnesoid X-activated receptor, in fetal skin development, 788
FcγRIIa receptors, endothelial, in vasculitis, 56
Ferrochetalase gene mutations, 87
Fetal Epidermal Differentiation and Barrier Development *In Vivo* is Accelerated by Nuclear Hormone Receptor Activators, Hanley K, Kömüves LG, Bass NM, He SS, Jiang Y, Crumrine D, Appel R, Friedman M, Bettencourt J, Min K, Elias PM, Williams ML, Feingold KR, 788
Fetal skin development *see* Skin development
FGF Expression Allows Nevus Cells to Survive in Three-Dimensional Collagen Gel Under Conditions that Induce Apoptosis in Normal Human Melanocytes, Alanko T, Rosenberg M, Saksela O, 111
Fibrin and Collagen Differentially Regulate Human Dermal Microvascular Endothelial Cell Integrins: Stabilization of αv/β3 mRNA by Fibrin, Feng X, Clark RAF, Galanakis D, Tonnesen MG, 913
Fibroblast growth factor (FGF)-2, nevus cell survival and, 111
Fibroblasts
type XVI collagen, 246
UV radiation and IL-1α synergy, 196
Fibronectin
in allergic contact dermatitis, 906
cleavage by mast cell tryptase, 567
induced IL-10 production, 49
Fibrotic skin diseases
collagen lysyl hydroxylation, 617
type XVI collagen, 246
Fibulin-1 and –2, in allergic contact dermatitis, 906
FK506, Langerhans cell co-stimulatory molecules and, 1021
Flt3 ligand, regulation of dendritic cells, 1028
Flt-4, in AIDS-associated Kaposi's sarcoma, 1047
Fluorescein isothiocyanate, 888
Fluorescent chemical cleavage of mismatch, COL7A1 mutation detection, 673
Focal contacts
type XIII collagen, 635
in wound healing, 651
Focal Dermal–Epidermal Separation and Fibronectin Cleavage in Basement Membrane by Human Mast Cell Tryptase, Kaminska R, Helisalmi P, Harvima RJ, Naukkarinen A, Horsmanheimo M, Harvima IT, 567
c-*Fos* protein, green tea extract and, 1070
Free Hapten Molecules are Dispersed by Way of the Bloodstream During Contact Sensitization to Fluorescein Isothiocyanate, Pior J, Vogl T, Sorg C, Macher E, 888
The Function of Nitric Oxide in Wound Repair: Inhibition of Inducible Nitric Oxide-Synthase Severely Impairs Wound Reepithelialization, Stallmeyer B, Kämpfer H, Kolb N, Pfeilschifter J, Frank S, 1090
Functional Expression and Analysis of a Human HLA-DQ Restricted, Nickel-Reactive T Cell Receptor in Mouse Hybridoma Cells, Vollmer J, Weltzien HU, Dormoy A, Pistoor F, Moulon C, 175

G

Galvanotaxis, keratinocytes, 851
Gap junction protein β-3 mutation, 1119
Gene therapy, PDGF-B, in ischemic wound healing, 375
Genetic Mapping and Physical Cloning of UVB Susceptibility Region in Mice, Handel-Fernandez ME, Kurimoto I, Streilen JW, Vincek V, 224
Gli1 Protein is Expressed in Basal Cell Carcinomas, Outer Root Sheath Keratinocytes and a Subpopulation of Mesenchymal Cells in Normal Human Skin, Ghali L, Wong ST, Green J, Tidman N, Quinn AG, 595
Glutathione, in murine stratum corneum, 1128
GPIbα, in dermal dendrocytes, 272
Granulocyte–Macrophage Colony-Stimulating Factor Gene Transfer to Dendritic Cells or Epidermal Cells Augments Their Antigen-Presenting Function Including Induction of Anti-Tumor Immunity, Ozawa H, Ding W, Torii H, Hosoi J, Seiffert K, Campton K, Hackett NR, Topf N, Crystal RG, Granstein RD, 999
Granulocyte macrophage colony-stimulating factor (GM-CSF), 541, 999, 1021
Grass pollen allergens, recombinant, 830
Green Tea Protects Against Psoralen Plus Ultraviolet A-Induced Photochemical Damage to Skin, Zhao JF, Zhang YJ, Jin XH, Athar M, Santella RM, Bickers DR, Wang ZY, 1070
Growth hormone transgenic mice, 967

H

HaCaT keratinocytes
bikunin expression, 182
ceramide levels, 98

interactions with malignant keratinocytes, 384
nitric oxide function, 1090
protein C inhibitor, 32
Hair
growth control, adrenergic influences, 878
keratin mutations, 263, 607
loss
in C3H/HeJ mice, 61
see also Alopecia
Hair Cycle-Dependent Changes in Adrenergic Skin Innervation, and Hair Growth Modulation by Adrenergic Drugs, Botchkarev VA, Peters EMJ, Botchkareva NV, Maurer M, Paus R, 878
Hair follicles
adrenergic innervation, 878
antibodies, in autoimmune polyendocrine syndrome type I, 1054
control of size, 873
Gli1 protein expression, 595
guide to stages of morphogenesis, 523
in *MSX-2* transgenic mice, 230
nexin-1 expression, 308
p63 protein, 1099
prolactin induced growth cycle in sheep, 865
TrkC function, 425
Hairless gene, human, mutations, 281, 687, 954
Hairless mouse
epidermal cytokines after UV irradiation, 1059
hyaluronan absorption, 740
stratum corneum, ozone exposure, 1128
Haplotype Analysis of Families with Erythropoietic Protoporphyria and Novel Mutations of the Ferrochetalase Gene, Wang X, Yang L, Kurtz L, Lichtin A, DeLeo VA, Bloomer J, Poh-Fitzpatrick MB, 87
Haptens, dispersal in bloodstream, 888
HAS1/HAS2 transfection, melanoma cells, 935
Hedgehog signaling, 595
Heitzmann, Carl, 861
Hematoblast, 861
Hemidesmosomes, BPAG1 and, 643
Hereditary non-polyposis colorectal cancer (HNPCC), 901
Herpes simplex
recurrent perioral, laser therapy, 221
virus, associated erythema multiforme, 808
Herpes Simplex Virus Associated Erythema Multiforme (HAEM) is Mechanistically Distinct from Drug-Induced Erythema Multiforme: Interferon-γ is Expressed in HAEM Lesions and Tumor Necrosis Factor-α in Drug-Induced Erythema Multiforme Lesions, Kokuba H, Aurelian L, Burnett J, 808
hHb1 mutation, 607
hHb6 mutations, 263, 607, 1123
High Levels of Expression of $p27^{KIP1}$ and Cyclin E in Invasive Primary Malignant Melanoma, Bales ES, Dietrich C, Bandyopadhyay D, Schwahn DJ, Xu W, Didenko V, Leiss P, Conrad N, Pereira-Smith O, Orengo I, Medrano EE, 1039
High performance thin layer chromatography (HPTLC), 894
High Prevalence of a Variety of Epidermodysplasia Verruciformis-Associated Human Papillomaviruses in Psoriatic Skin of Patients Treated or not Treated with PUVA, Weissenborn SJ, Höpfl R, Weber F, Smola H, Pfister HJ, Fuchs PG, 122
Histamine, in mastocytosis, 93
HIV-Protease Inhibitors Reduce Cell Adherence of *Candida Albicans* Strains by Inhibition of Yeast Secreted Aspartic Proteases, Borg-von Zepelin M, Meyer I, Thomssen R, Würzner R, Sanglard D, Telenti A, Monod M, 747
HLA associations
pemphigus, 107
psoriasis, 322, 693
HLA-Cw6 and the Genetic Predisposition to Psoriasis: a Meta-Analysis of Published Serologic Studies, *Letter*, Mallon E, Newson R, Bunker CB, 693
HLA-DQ restriction, in nickel allergy, 175
Homeobox genes, *MSX-2*, 230
Homeoproteins, regulation of BPAG1, 643
A Homozygous Nonsense Mutation in the Zinc-Finger Domain of the Human Hairless Gene Underlies Congenital Atrichia, *Letter*, Ahmad W, Nomura K, McGrath JA, Hashimoto I, Christiano AM, 281
Hotspot mutations, ferrochetalase gene, 87
Human dermal microvascular endothelial cells, integrins, 913
Human dermal papilla cells, nexin-1 expression, 308
Human Herpesvirus 7 and Pityriasis Rosea, *Letter*, Watanabe T, Sugaya M, Nakamura K, Tamaki K, 288
Human herpesvirus type 8 (HHV-8), in Kaposi's sarcoma, 613
Human Keratinocytes Constitutively Express Interleukin-18 and Secrete Biologically Active Interleukin-18 After Treatment with Pro-Inflammatory Mediators and Dinitrochlorobenzene, Naik SM, Cannon G, Burbach GJ, Singh SR, Swerlick RA, Wilcox JN, Ansel JC, Caughman SW, 766
Human papillomaviruses, epidermodysplasia verruciformis-associated, in psoriasis, 122
Human skin
bikunin expression, 182
ceramide levels, 98
fibronectin-mediated IL-10 production, 49
Gli1 protein, 595
GPIbα expression, 272
green tea extract application, 1070
high-resolution ultrasound, 821
hyaluronan absorption, 740
in vivo confocal scanning laser microscopy, 293
irritation-induced E-cadherin expression, 170
keratin oxidation, 335
lipids, cryo-electron diffraction, 403
local anesthetic base», topically applied, 304
mast cell tryptase actions, 567
midkine expression, 398
nitric oxide effects, 392
p53 immunopositive clones, 972
p63 protein, 1099
protein C inhibitor, 32
psoriatic grafts on SCID mice, 1082
stratum corneum lamellae, disruption by water, 960
survivin expression, 415
T cell stimulating antigens, 355
tryptophan fluorescence, 977
type XIII collagen, 635
type XVI collagen, 246
viscoelasticity and anisotropy, 732
vitamin E secretion, 1006
Hyaluronan, cutaneous absorption, 740
Hyaluronate, melanoma cell motility and, 935
Hydrocortisone-impaired wound healing, 773
Hydrogen peroxide, UVA-irradiated riboflavin and, 77
8-Hydroxy-2'-deoxyguanosine
in arsenic-related Bowen's disease, 26
in UVA-induced DNA damage, 209
Hydroxyproline, skin, in bleomycin-induced dermal sclerosis, 843
Hypertrophic scars, role of IL-15, 238
Hypoxia Potentiates Ultraviolet A-Induced Riboflavin Cytotoxicity, Minami H, Sato K, Maeda T, Taguchi H, Yoshikawa K, Kosaka H, Shiga T, Tsuji T, 77

I

IAP proteins, 415, 1076
Identification of Differentially Expressed Genes During a Wool Follicle Growth Cycle Induced by Prolactin, Rufaut NW, Pearson AJ, Nixon AJ, Wheeler TT, Wilkins RJ, 865
Identification of Epitopes on Tyrosinase which are Recognized by Autoantibodies from Patients with Vitiligo, Kemp EH, Waterman EA, Gawkrodger DJ, Watson PF, Weetman AP, 267
Identification of a Germline Mutation in Keratin 17 in a Family with Pachyonychia Congenita Type 2, Çelebi JT, Tanzi EL, Yao YJ, Michael EJ, Peacocke M, 848
Identification of a Novel Mutation R42P in the Gap Junction Protein β-3 Associated with Autosomal Dominant Erythrokeratoderma Variabilis, Wilgoss A, Leigh IM, Barnes MR, Dopping-Hepenstal P, Eady RAJ, Walter JM, Kennedy CTC, Kelsell DP, 1119
Identification of Novel Mutations in Basic Hair Keratins hHb1 and hHb6 in Monilethrix: Implications for Protein Structure and Clinical Phenotype, Korge BP, Hamm H, Jury CS, Traupe H, Irvine AD, Healy E, Birch-Machin M, Rees JL, Messenger AG, Holmes SC, Parry DAD, Munro CS, 607
IgA autoantibodies, in linear IgA disease, 947
IgE-binding proteins, *Malassezia furfur*, 156

IgG_1 and IgG_3 are the Major Immunoglobulin Subclasses Targeting Epitopes within the NC16A Domain of BP180 in Pemphigoid Gestationis, *Letter*, Chimanovitch I, Schmidt E, Messer G, Döpp R, Partscht K, Bröcker EB, Guidice GJ, Zillikens D, 140
IL-4 Inhibits the Migration of Human Langerhans Cells through the Downregulation of TNF Receptor II Expression, Takayama K, Yokozeki H, Ghoreishi M, Satoh T, Katayama I, Umeda T, Nishioka K, 541
Immune Complexes from Vasculitis Patients Blind to Endothelial Fc Receptors Independent of the Allelic Polymorphism of FcγRIIa, Gröger M, Fischer GF, Wolff K, Petzelbauer P, 56
Immunoglobulin E (IgE)
in nonallergic atopic dermatitis, 628
recombinant allergen-specific, 830
Immunosuppressive drugs, effects on Langerhans cells, 1021
In Vivo Confocal Scanning Laser Microscopy of Human Skin II: Advances in Instrumentation and Comparison With Histology, Rajadhyaksha, González S, Zavislan JM, Anderson RR, Webb RH, 293
The *In Vivo* Fluorescence of Tryptophan Moieties in Human Skin Increases with UV Exposure and is a Marker for Epidermal Proliferation, Brancaleon L, Lin G, Kollias N, 977
Increased Formation of Thromboxane *In Vivo* in Humans with Mastocytosis, Morrow JD, Oates JA, Roberts LJ, Zackert WE, Mitchell TA, Lazarus G, Guzzo C, 93
Increased Synthesis of Hyaluronate Enhances Motility of Human Melanoma Cells, Ichikawa T, Itano N, Sawai T, Kimata K, Koganehira Y, Saida T, Taniguchi S, 935
Induction of Melanogenic Abnormalities in NF1+/- Mutant Mice by DMBA, *Letter*, Mashour GA, Martuza RL, Kurtz A, 1133
Induction of Transcription Factor AP-2 by Inflammatory Cytokines in Human Keratinocytes, Oyama N, Iwatsuki K, Homma Y, Kaneko F, 600
Infection of Circulating $CD34^+$ Cells by HHV-8 in Patients with Kaposi's Sarcoma, Henry M, Uthman A, Geusau A, Rieger A, Furci L, Lazzarin A, Lusso P, Tschachler E, 613
The Inflammatory and Cytotoxic Effects of a Nitric Oxide Releasing Cream on Normal Skin, Ormerod AD, Copeland P, Hay I, Husain A, Ewen SWB, 392
Integrin αv/β3, regulation by fibrin, 913
Interferon-γ (IFN-γ)
after UVA and UVB irradiation, 1059
in herpes simplex virus-associated erythema multiforme, 808
induction by IL-18, 350, 766
induction by PUVA, 202
in psoriasis, 752
Interleukin-1α
sodium arsenate actions, 760
synergy with UV radiation, 196
Interleukin-1 receptor, hair follicle morphogenesis and, 523
Interleukin-2 (IL-2), in psoriasis, 752
Interleukin-4 (IL-4)
migration of Langerhans cells and, 541
in psoriasis, 752
Interleukin-6 (IL-6), induction of AP-2, 600
Interleukin-8 (IL-8), thalidomide actions, 720
Interleukin-10 (IL-10)
after UVA and UVB irradiation, 1059
fibronectin-induced production, 49
promoter polymorphisms in psoriasis, 214
in psoriasis, 752
in psoriatic skin xenografts, 1082
Interleukin-12 (IL-12)
after UVA and UVB irradiation, 1059
interferon-γ induction, 350
regulation of dendritic cells, 1028
rolipram interactions, 82
Interleukin-15 (IL-15), in hypertrophic scars, 238
Interleukin-16 (IL-16), in mycosis fungoides, 658
Interleukin-18 (IL-18)
interferon-γ induction, 350, 766
production by keratinocytes, 369, 766
Interleukins 18 and 12 Synergistically Upregulate Interferon-γ Production by Murine Dendritic Epidermal T Cells, Sugaya M, Nakamura K, Tamaki K, 350
Intermediate filaments, in AP-2α-deficient mice, 816
Involucrin
in calcium-stimulated keratinocytes, 340
in keratin 10-deficient mice, 329
Involucrin-Positive Keratinocytes Demonstrate Decreased Migration Speed But Sustained Directional Migration in a DC Electric Field, Obedencio GP, Nuccitelli R, Isseroff RR, 851
IP-9, in contact dermatitis, 574
IP-10, in contact dermatitis, 574
Irritant contact dermatitis, chemokine expression, 574
Irritation, sodium dodecyl sulfate-induced, 170
Isoproterenol, hair growth modulation, 878

K

Kaposi's sarcoma
human herpesvirus type 8 and, 613
VEGF-C/receptor expression, 1047
KDR, in AIDS-associated Kaposi's sarcoma, 1047
Keloid, type XVI collagen, 246
Keratin
10
deficient mice, 329
oxidation in human stratum corneum, 335
17, mutation, 848
in AP-2α-deficient mice, 816
type II (basic) hair mutations, 263, 607, 1123
wool (KRTAP3.2), 865
Keratinocytes
bikunin expression, 182
BPAG1 regulation, 643
calcium-sensing receptors, 340
endogenous retroviruses, 587
epithelial sodium channels, 796
galvanotaxis, 851
hair follicle, autoantibodies, 1054
in herpes simplex virus-associated erythema multiforme, 808
induction of AP-2 by cytokines, 600
interleukin-18 production, 369, 766
malignant, in organotypic tissue model, 384
migration *see* Migration, keratinocytes
nerve growth factor actions, 920
outer root sheath, Gli1 protein, 595
p63 protein, 1099
proliferation
nitric oxide function, 1090
in skin denervation, 579
thalidomide actions, 720
protein C inhibitor expression, 32
regulation of IFN-γ, 350
sheets, laminin 5 actions, 38
sodium arsenate actions, 760
Streptococcus thermophilus effects, 98
transgenic TNF-α induced-apoptosis, 856
type XIII collagen, 635
urokinase system photoinduction, 69
UV induction of $p21^{WAF1/CIP1}$, 283
UV radiation and IL-1α synergy, 196
Keratoderma, striate palmoplantar, 940
KET gene, splicing variant (CUSP), 146
Kit
in human melanocytes, 139
melanoma cell adhesion molecule gene regulation, 711
KRTAP3.2 wool keratin, 865

L

L-selectin, skin endothelial cell interactions, 410
Lamellar bodies, in keratin 10-deficient mice, 329
Laminin 5
β3 (LAMB3) gene mutations, 314
grafting of keratinocyte sheets and, 38
Langerhans cells
CC chemokine expression, 991
co-stimulatory molecules, 1021
in contact hypersensitivity, 888
GM-CSF function, 999
IL-4-inhibited migration, 541
nitric oxide effects, 392

in polymorphous light eruption, 4
regulation of IFN-γ, 350
regulation by IL-12 and Flt3 ligand, 1028
UVB-induced apoptosis, 802
in UVB susceptibility, 983
Laser therapy, in recurrent herpes simplex, 221
Leukocytes, extravasation, 11, 82
Leukocytoclastic vasculitis, endothelial Fc receptors, 56
Leukoderma, vitiligo-like, 1033
Lichen planus pemphigoides, target autoantigen, 117
Linear IgA disease, 947
Lipids
in immortalized human sebaceous gland cells, 1011
stratum corneum
in atopic dermatitis, 894
disruption by water and surfactants, 960
electron diffraction studies, 403
in keratin 10-deficient mice, 329
water diffusion rates and, 533
Lipodermatosclerosis, collagen lysyl hydroxylation, 617
Liver X receptor, in fetal skin development, 788
Local anesthetic bases, percutaneous penetration, 304
Local Ultraviolet B Irradiation Impairs Contact Hypersensitivity Induction by Triggering Release of Tumor Necrosis Factor-α from Mast Cells. Involvement of Mast Cells and Langerhans Cells in Susceptibility to Ultraviolet B, Alard P, Niizeki H, Hanninen L, Streilein JW, 983
Loss of heterozygosity
PTCH gene, 279
in skin-exposed skin, 972
Low Frequency of Genetic Change in p53 Immunopositive Clones in Human Epidermis, Tabata H, Nagano T, Ray AJ, Flanagan N, Birch-Machin MA, Rees JL, 972
Low-Intensity Laser Therapy is an Effective Treatment for Recurrent Herpes Simplex Infection. Results from a Randomized Double-Blind Placebo-Controlled Study, Schindl A, Neumann R, 221
Lupus erythematosus, endogenous retroviruses, 587
Lymph nodes, detection of melanoma micrometastases, 554

M

Macrophage colony-stimulating factor (M-CSF), 1021
Macrophage metalloelatase (MMP-12), in actinic damage, 664
Macrophages
IL-10 production in UV-exposed human skin, 49
in polymorphous light eruption, 4
Major histocompatibility complex (MHC)
expression in alopecia areata, 61
psoriasis susceptibility locus, 322
The Majority of Epidermal T Cells in Psoriasis Vulgaris Lesions Can Produce Type 1 Cytokines, Interferon-γ, Interleukin-2, and Tumor Necrosis Factor-α, Defining TC1 (Cytotoxic T Lymphocyte) and TH1 Effector Populations: a Type 1 Differentiation Bias is Also Measured in Circulating Blood T Cells in Psoriatic Patients, Austin LM, Ozawa M, Kikuchi T, Walters IB, Krueger JG, 752
Malassezia furfur allergens, 156
Male growth hormone transgenic mice, skin overgrowth, 967
Mast cells
secretagogues, inducing GPIbα, 272
tryptase, dermal–epidermal separation by, 567
in UVB susceptibility, 983
Mastocytosis, thromboxane formation, 93
Matrilysin (MMP-7), in actinic damage, 664
Matrix metalloproteinases (MMPs)
in actinic damage, 664
in allergic contact dermatitis, 906
MECA-79, skin endothelial cell interactions, 410
Melanin, UVA-induced DNA damage and, 209
α-Melanocyte-stimulating hormone (α-MSH), inhibits NF-κB, 560
Melanocytes
α-MSH inhibits NF-κB, 560
differentiation antigens, 1033
phototype and antioxidants, 424
SCF-KIT pathway, 139
specific T-cell responses, 286
survival in collagen gel, 111
4-tertiary butyl phenol actions, 725
Melanoma
α-MSH inhibits NF-κB, 560
cells, hyaluronate-transfected, 935
detection of micrometastases, 554
immunotherapy, 1028, 1033
melanoma cell adhesion molecule gene regulation, 711
$p27^{KIP1}$ and cyclin E expression, 1039
survivin expression, 415, 1076
T cell receptor repertoire, 286
tyrosine analog therapy, 928
UVA-induced DNA damage, 209
vitiligo-like leukoderma and, 1033
vs Spitz nevus, 1065
Melanoma cell adhesion molecule gene, regulation, 711
Merkel cells, in BDNF transgenic mice, 691
Mesenchymal cells, Gli1 protein expression, 595
8-Methoxypsoralen plus UVA therapy, inducing Th2 to Th2 shift, 202
Microsatellite Instability in Benign Skin Lesions in Hereditary Non-Polyposis Colorectal Cancer Syndrome, Swale VJ, Quinn AG, Wheeler JM, Beck NE, Dove-Edwin I, Thomas HJW, Bodmer WF, Bataille VA, 901
Midkine, in neurofibromatosis type-1, 398
Mig, in contact dermatitis, 574
Migration
hyaluronate-transfected melanoma cells, 935
keratinocytes
in DC electric field, 851
thalidomide actions, 720
thymosin β4-stimulated, 364
zyxin redistribution and, 651
Langerhans cells, 541
Minimal phototoxic dose, PUVA, timing of assessment, 346
"Minimal Residual Disease in Melanoma" symposium, 1999, *Abstracts*, 511
Mitigation of Delayed-Type Hypersensitivity Reactions by a CD44 Variant Isoform v3-Specific Antibody: Blockade of Leukocyte Egress, Seiter S, Engel P, Föhr N, Zöller M, 11
Mitochondria, sodium arsenate actions, 760
A Model for the Emergence of Café-au-Lait Macules, *Letter*, Kestler HA, Haschka M, 860
Moderation of Phenotypic Severity in Dystrophic and Junctional Forms of Epidermolysis Bullosa Through In-Frame Skipping of Exons Containing Non-Sense or Frameshift Mutations, McGrath JA, Ashton GHS, Mellerio JE, Salas-Alanis JC, Swensson O, McMillan JR, Eady RAJ, 314
Modulation of IL-10, IL-12, and IFN-γ in the Epidermis of Hairless Mice by UVA (320–400 nm) and UVB (280–320 nm) Radiation, Shen J, Bao S, Reeve VE, 1059
Modulation of Irritation-Induced Increase of E-selectin mRNA *In Vivo* by Topically Applied Corticosteroids, Kukutsch NA, Coors EA, Gruschwitz MS, von den Driesch P, 170
Modulation of Keratinocyte Proliferation by Skin Innervation, Hsieh ST, Lin WM, 579
Moisturizers, skin viscoelasticity and anisotropy and, 732
Molecular Cloning and Tissue Expression of the Murine Analog to Human Stratum Corneum Chymotryptic Enzyme, Bäckman A, Strandén P, Brattsand M, Hansson L, Egelrud T, 152
Molecular Cytogenetic Analysis of Spitz Nevi Shows Clear Differences to Melanoma, Bastian BC, Wesselmann U, Pinkel D, LeBoit PE, 1065
Monilethrix: A Novel Mutation (Glu402Lys) in the Helix Termination Motif and the First Causative Mutation (Asn114Asp) in the Helix Initiation Motif of the Type II Hair Keratin hHb6, Winter H, Clark RD, Tarras-Wahlberg C, Rogers MA, Schweizer J, 263
Monilethrix, basic hair keratin mutations, 263, 607, 1123
Monocytic/macrophagic cells, $CD11b^+$
IL-10 production in UV-exposed skin, 49
in polymorphous light eruption, 4
Mononuclear cells, peripheral blood, HHV-8 infection in Kaposi's sarcoma, 613
Mouse
adrenergic control of hair growth, 878
allergic contact dermatitis, 906
alopecia areata model, 61
anti-CD44v3 antibodies, 11
AP-2α-deficient, keratin expression, 816
bleomycin-induced dermal sclerosis, 843
contact hypersensitivity, 224, 888
dendritic epidermal T cells, 350
epidermal sheets, UVB-induced apoptosis, 802
green tea extract application, 1070
hair follicle morphogenesis, guide, 523

hairless, 740, 1059, 1128
hybridoma cells, nickel reactive, 175
IL-12 and Flt3 ligand regulation of dendritic cells, 1028
keratin 10-deficient, 329
Langerhans cell cDNA library, 991
melanoma chemotherapy, 928
NF1 +/-, DMBA actions, 1133
nitric oxide function in wound repair, 1090
nude, grafting of keratinocyte sheets, 38
plasminogen activator knockout, pemphigus lesions, 22
SCID, psoriatic skin grafts, 1082
skin wound healing, 369
sodium arsenate actions, 760
stratum corneum, ozone exposure, 1128
stratum corneum chymotryptic enzyme, 152
tape-stripping of epidermis, 189
thrombospondin 2-deficient, 782
transgenic *see* Transgenic mice
UVB susceptibility, 224, 983
Mouse Langerhans Cells Differentially Express an Activated T Cell-Attracting CC Chemokine, Ross R, Ross XL, Ghadially H, Lahr T, Schwing J, Knop J, Reske-Kunz AB, 991
The MRNA for Protease Nexin-1 is Expressed in Human Dermal Papilla Cells and its Level is Affected by Androgen, Sonoda T, Asada Y, Kurata S, Takayasu S, 308
MSX-2 transgenic mice, 230
Muir–Torre syndrome, 901
Mutations
BPAG2/COL17A1, 1114
COL7A1, 314, 419, 673
DDB2 gene, 251
desmoplakin, 940
EDA1 gene, 285
ferrochetalase gene, 87
gap junction protein β-3, 1119
human hairless gene, 281, 687, 954
keratin 17, 848
LAMB3, 314
type II (basic) hair keratins, 263, 607, 1123
Mycosis fungoides
circulating $CD7^-$ T helper cells, 622
IL-16 expression, 658

N

Neoplasia
corticotropin-releasing hormone actions, 838
organotypic model of intraepithelial, 384
survivin expression, 415
Nerve Growth Factor Protects Human Keratinocytes from Ultraviolet-B-Induced Apoptosis, Marconi A, Vaschieri C, Zanoli S, Giannetti A, Pincelli C, 920
Nerves, skin
adrenergic, in hair growth control, 878
epidermal effects, 579
Neurofibromatosis type-1, 1133
café-au-lait macules, 858
midkine expression, 398
Neurotrophin-3 receptor (TrkC), hair follicle development and, 425
Nevus cells, FGF-2 requirements, 111
A New Computer-Based Evaporimeter System for Rapid and Precise Measurements of Water Diffusion Through Stratum Corneum *In Vitro*, Norlén L, Engblom J, Andersson M, Forslind B, 533
A Newly Identified Patient with Clinical Xeroderma Pigmentosum Phenotype has a Non-Sense Mutation in the DDB2 Gene and Incomplete Repair in (6–4) Photoproducts, Itoh T, Mori T, Ohkubo H, Yamaizumi M, 251
Nexin-1, in human dermal papilla cells, 308
NF1 heterozygotes, DMBA-induced melanogenic abnormalities, 1133
NF-κB, inhibition by α-melanocyte-stimulating hormone, 560
Nickel, T-cell receptors specific to, 175
Nitric oxide
effects on normal skin, 392
in wound healing, 1090
Nitric oxide synthase, inducible, inhibition, 1090
Norepinephrine, in hair growth control, 878
Normal Ultrastructure, but Altered Stratum Corneum Lipid and Protein Composition in a Mouse Model for Epidermolytic Hyperkeratosis, Reichelt J, Doering T, Schnetz E, Fartasch M, Sandhoff K, Magin TM, 329
A Novel Component of Epidermal Cell-Matrix and Cell–Cell Contacts: Transmembrane Protein Type XIII Collagen, Peltonen S, Hentula M, Hägg P, Ylä-Outinen H, Tuukkanen J, Lakkakorpi J, Rehn M, Pihlajaniemi T, Peltonen J, 635
Novel *Hairless* Mutations in Two Kindreds with Autosomal Recessive Papular Atrichia, Kruse R, Cichon S, Anker M, Hillmer AM, Barros-Núñez P, Cantú JM, Leal E, Weinlich G, Schmuth M, Fritsch P, Ruzicka T, Propping P, Nöthen MM, 954
NPS R-467, promoting keratinocyte differentiation, 340
Nuclear hormone receptor activators, in fetal skin development, 788

O

Occlusion, tape-stripped epidermis, 189
Organotypic culture, intraepithelial neoplasia, 384
Ossification, hairless protein and, 954
Overexpression of Amphiregulin in the Epidermis of Transgenic Mice Induces a Psoriasis-Like Cutaneous Phenotype, *Letter*, Cook PW, Pittelkow MR, Piepkorn M, 860
Overexpression of Brain-Derived Neurotrophic Factor Increases Merkel Cell Number in Murine Skin, *Letter*, Botchkarev VA, Kief S, Paus R, Moll I, 691
Overgrowth of Skin in Growth Hormone Transgenic Mice Depends on the Presence of Male Gonads, Wanke R, Milz S, Rieger N, Ogiolda L, Renner-Müller I, Brem G, Hermanns W, Wolf E, 967
Overhydroxylation of Lysyl Residues is the Initial Step for Altered Collagen Cross-Links and Fibril Architecture in Fibrotic Skin, Brinckmann J, Notbohm H, Tronnier M, Açil Y, Fietzek PP, Schmeller W, Müller PK, Bätge B, 617
Oxidative stress
in human stratum corneum, 335
in murine stratum corneum, 1128
vitamin E-mediated protection, 1006
see also Reactive oxygen species
Oxygen free radicals *see* Reactive oxygen species
Ozone exposure, murine stratum corneum, 1128

P

$p16^{INK4a}$, in melanoma, 1039
$p21^{WAF1/CIP1}$
expression in melanoma, 1039
induction in keratinocytes, 283
$p27^{KIP1}$, expression in melanoma, 1039
p53 protein
family, 146, 1099
green tea extract and, 1070
immunopositive clones, in human epidermis, 972
nitric oxide effects, 392
UV induction of $p21^{WAF1/CIP1}$ and, 283
p63 protein, in human keratinocytes, 1099
p73 protein, CUSP homology, 146
Pachyonychia congenita type 2 (Jackson-Lawler), 848
Paget's disease, extramammary, 258
Palmar skin, high-resolution ultrasound, 821
Palmoplantar keratoderma, striate, 940
Paraneoplastic pemphigus, plectrin as autoantigen, 422
Pemphigoid gestationis, IgG subclasses targeting BP180 epitopes, 140
Pemphigus
foliaceus
HLA associations, 107
plasminogen activator in, 22
mechanism of photoinducibility, 69
paraneoplastic, plectrin as autoantigen, 422
vulgaris
HLA associations, 107
plasminogen activator in, 22
Pemphigus Vulgaris and Pemphigus Foliaceus Antibodies are Pathogenic in Plasminogen Activator Knockout Mice, Mahoney MG, Wang ZH, Stanley JR, 22

Percutaneous Penetration of Local Anesthetic Bases: Pharmacodynamic Measurements, Leopold CS, Maibach HI, 304
Periderm disaggregation, 1106
Peripheral Lymph Node Addressins Are Expressed on Skin Endothelial Cells, Lechleitner S, Kunstfeld R, Messeritsch-Fanta C, Wolff K, Petzelbauer P, 410
Peroxisome proliferator-activated receptor, in fetal skin development, 788
Phage surface display technology, *Malassezia furfur* allergens, 156
Phenolic agents, 725, 928
Phorbol esters, 711, 766
Phorbolin-1, in psoriasis, 162
Phosphodiesterase 4 inhibitor, in T cell-mediated inflammation, 82
Photo-decomposition of sunscreens, 547
Photodamage, matrix metalloproteinases in, 664
Photoproducts, (6–4), incomplete repair, 251
Phototherapy
  in recurrent perioral herpes simplex, 221
  see also Psoralen ultraviolet A (PUVA) therapy
Phototypes, cultured melanocytes, antioxidants and, 424
Pig skin, stratum corneum lamellae, disruption by water, 960
Pityriasis rosea, human herpesvirus 7 and, 288
Pityrosporum orbiculare (*Malassezia furfur*) allergens, 156
Plasminogen activator, in pemphigus, 22
Platelet-derived growth factor-B, adenoviral-mediated overexpression, in ischemic wound healing, 375
Plectin serves as an autoantigen in paraneoplastic pemphigus, *Letter*, Aho S, Mahoney MG, Uitto J, 422
Polymorphous light eruption, Langerhans cells and $CD11b^+$ cells, 4
Porphyria, haplotype analysis, 87
Pre-term infants, skin barrier formation, 1106
Pretreatment of Human Keratinocyte Sheets with Laminin 5 Improves their Grafting Efficiency, Takeda A, Kadoya K, Shioya N, Uchinuma E, Tsunenaga M, Amano S, Nishiyama T, Burgeson RE, 38
Prolactin induced wool follicle growth cycle, 865
Prostaglandin D_2, in mastocytosis, 93
Protamine, nevus cell survival and, 111
Proteases
  aspartic, *Candida albicans*, 747
  mast cell, causing dermal–epidermal separation, 567
  nexin-1, 308
  serine *see* Serine proteases
Protein C inhibitor is Expressed in Keratinocytes of Human Skin, Krebs M, Uhrin P, Vales A, Prendes-Garcia MJ, Wojta J, Geiger M, Binder BR, 32
Protein Oxidation in Human Stratum Corneum: Susceptibility of Keratins to Oxidation *In Vitro* and Presence of a Keratin Oxidation Gradient *In Vivo*, Thiele JJ, Hsieh SN, Briviba K, Sies H, 335
Protein truncation test, COL7A1 mutation detection, 673
Psoralen ultraviolet A (PUVA) therapy
  erythema time-course, 346
  HPV-DNA in psoriatic skin lesions and, 122
  modulating T cell cytokines, 202
  protective effects of green tea, 1070
Psoriasis
  in amphiregulin overexpressing transgenic mice, 860
  animal models, 427
  AP-2 induction by cytokines, 600
  cutaneous blood flow, 127
  1α,25-dihydroxycholecalciferol and cyclosporine-induced suppression, 1082
  epidermodysplasia verruciformis-associated HPV, 122
  gene polymorphisms, 214
  high-resolution ultrasound, 821
  HLA associations, 322, 693
  phorbolin-1 cloning and expression, 162
  PUVA therapy *see* Psoralen ultraviolet A (PUVA) therapy
  TC1 and TH1 effector cells, 752
Psoriasis Upregulated Phorbolin-1 Shares Structural but not Functional Similarity to the mRNA-Editing Protein Apobec-1, Madsen P, Anant S, Rasmussen HH, Gromov P, Vorum H, Dumanski JP, Tommerup N, Collins JE, Wright CL, Dunham I, MacGinnitie AJ, Davidson NO, Celis JE, 162
PTCH (*patch*) gene, loss of heterozygosity, 279
PUVA therapy *see* Psoralen ultraviolet A (PUVA) therapy
Pyridinolines, in lipodermatosclerosis, 617

R

Rabbit
  ischemic wound healing, 375
  skin viscoelasticity and anisotropy, 732
Rat
  fetal, nuclear hormone receptor activators, 788
  nude, grafting of keratinocyte sheets, 38
  skin denervation, 579
  thymosin β4 stimulation of wound healing, 364
Reactive oxygen species
  arsenic effects, 26, 760
  in bleomycin-induced dermal sclerosis, 843
  UVA-irradiated riboflavin and, 77
Regulation of Epidermal Bullous Pemphigoid Antigen 1 (BPAG1) Synthesis by Homeoprotein Transcription Factors, Mainguy G, Ernø H, Montesinos ML, Lesaffre B, Wurst W, Volovitch M, Prochiantz A, 643
Regulation of the Melanoma Cell Adhesion Molecule Gene in Melanoma: Modulation of mRNA Synthesis by Cyclic Adenosine Monophosphate, Phorbol Ester, and Stem Cell Factor/c-Kit Signaling, Karlen S, Braathem LR, 711
Retardation of Hair Follicle Development by the Deletion of Trkc, High-Affinity Neurotrophin-3 Receptor, *Letter*, Botchkareva NV, Botchkarev VA, Metz M, Silos-Santiago I, Paus R, 425
Retinoids, human sebaceous gland cells and, 1011
Retroviruses, endogenous, UVB-mediated activation, 587
Reverse transcriptase-polymerase chain reaction (RT-PCR)
  detection of melanoma micrometastases, 554
  IL-16 detection in mycosis fungoides, 658
Riboflavin cytotoxicity, UVA-induced, 77
RNA editing, 162
The Role of Melanin in the Induction of Oxidative DNA Base Damage by Ultraviolet A Irradiation of DNA or Melanoma Cells, Kvamm E, Tyrrell RM, 209
The Role of Oxidative DNA Damage in Human Arsenic Carcinogenesis: Detection of 8-Hydroxy-2'-Deoxyguanosine in Arsenic-Related Bowen's Disease, Matsui M, Nishigori C, Toyokuni S, Takada J, Akaboshi M, Ishikawa M, Imamura S, Miyachi Y, 26
Rolipram Inhibits Staphylococcal Enterotoxin B-Mediated Induction of the Human Skin-Homing Receptor on T Lymphocytes, Santamaria LF, Torres R, Giménez-Arnau AM, Giménez-Camarasa JM, Ryder H, Palacios JM, Beleta J, 82

S

SCF-KIT Pathway in Human Epidermal Melanocyte Homeostasis, *Letter*, Longley BJ, Carter EL, 139
SCID mice, psoriatic human skin grafts, 1082
Scleroderma *see* Systemic sclerosis
Sebaceous gland cells, immortalized human, 1011
Sebaceous Gland Secretion is a Major Physiologic Route of Vitamin E Delivery to Skin, Thiele JJ, Weber SU, Packer L, 1006
Sebum, vitamin E secretion, 1006
Selective Cloning of Allergens from the Skin Colonizing Yeast *Malassezia furfur* by Phage Surface Display Technology, Lindborg M, Magnusson CGM, Zargari A, Schmidt M, Scheynius A, Crameri R, Whitley P, 156
Selective Incorporation and Specific Cytocidal Effect as the Cellular Basis for the Antimelanoma Action of Sulphur Containing Tyrosine Analogs, Thomas PD, Kishi H, Cao H, Ota M, Yamashita T, Singh S, Jimbow K, 928
Serine proteases
  inhibitors, 32, 182
  stratum corneum chymotryptic enzyme, 152
Serum Androgens and Genetic Linkage Analysis in Early Onset Androgenetic Alopecia, *Letter*, Sreekumar GP, Pardinas J, Wong CQ, Whiting D, Katz HI, Price V, Zlotogorski A, Roberts J, Clark BC, Stenn K, Parimoo S,, 277
Sex hormones, male, growth hormone interactions, 967
Sézary syndrome, circulating $CD7^-$ T helper cells, 622
Shear wave propagation, skin, 732
Sheep, prolactin induced wool follicle growth, 865
(6–4) photoproducts, incomplete repair, 251
Skewed Expression of Activation, Differentiation and Homing-Related Antigens in Circulating Cells from Patients with Cutaneous T Cell Lymphoma Associated with $CD7^-$ T Helper Lymphocytes Expansion,

Scala E, Russo G, Cadoni S, Narducci MG, Girardelli CR, De Pità O, Puddu P, 622
Skin cancer
arsenic-related, 26
genetics of susceptibility in mice, 224
Gli1 protein expression, 595
protective effect of melanin, 209
protective effects of green tea, 1070
survivin expression, 415
see also Melanoma; Squamous cell carcinoma
Skin development
in AP-2α-deficient mice, 816
nuclear hormone receptors and, 788
regional patterning, 1106
Skin grafts, psoriatic human, on SCID mice, 1082
Skin lesions, benign, in HNPCC patients, 901
Skin overgrowth, in growth hormone transgenic mice, 967
Skin testing, using recombinant pollen allergens, 830
Society for Cutaneous Ultrastructure Research, Annual Meeting 1999, *Abstracts*, 696
Society for Investigative Dermatology, Annual Meeting 1999, *Abstracts*, 143
Sodium Arsenate Induces Overproduction of Interleukin-1α in Murine Keratinocytes: Role of Mitochondria, Corsini E, Asti L, Viviani B, Marinovich M, Galli CL, 760
Sodium channels, epithelial, 796
Sodium dodecyl sulfate
-induced irritation, 170
stratum corneum disruption, 960
stratum corneum water diffusion rate and, 533
Solar elastosis and keratosis, matrix metalloproteinases, 664
Sonography of the Skin at 100 MHz Enables *In Vivo* Visualization of Stratum Corneum and Viable Epidermis in Palmar Skin and Psoriatic Plaques, El Gammal S, El Gammal C, Kaspar K, Pieck C, Altmeyer P, Vogt M, Ermert H, 821
Sp1, melanoma cell adhesion molecule gene regulation, 711
Spatiotemporal Changes of Fibronectin, Tenascin-C, Fibulin-1, and Fibulin-2 in the Skin During the Development of Chronic Contact Dermatitis, Kusubata M, Hirota A, Ebihara T, Kuwaba K, Matsubara Y, Sasaki T, Kusakabe M, Tsukada T, Irie S, Koyama YI, 906
Spatiotemporal Expression Patterns of Keratins in Skin of AP-2α-deficient Mice, Talbot D, Lorgin J, Schorle H, 816
Sphingomyelinase, *Streptococcus thermophilus*, 98
Spitz nevi, molecular cytogenetics, 1065
Squalene, vitamin E correlation, 1006
Squamous cell carcinoma
AP-2 induction by cytokines, 600
p63 protein, 1099
Squaric acid dibutylester (SADBE), in alopecia areata-like hair loss in mice, 61
Staphylococcal enterotoxin B, 82, 628
Stem cell factor (SCF)
in human melanocytes, 139
melanoma cell adhesion molecule gene regulation, 711
Stomatitis, chronic ulcerative, 146
Stratifin, ovine, 865
Stratum corneum
ceramide levels, 98
fetal development, patterning in, 1106
high-resolution ultrasound, 821
in keratin 10-deficient mice, 329
keratin 10 oxidation in human, 335
lamellae, disruption by water and surfactant, 960
lipids *see* Lipids, stratum corneum
T cell stimulating antigens, 355
vitamin C, uric acid and glutathione gradients, 1128
vitamin E content, 960
water diffusion through, *in vitro*, 533
Stratum corneum chymotryptic enzyme (SSCE), murine, 152
Streptococcus thermophilus, keratinocyte ceramide levels and, 98
Striate Palmoplantar Keratoderma Resulting from Desmoplakin Haploinsufficiency, Whittock NV, Ashton GHS, Dopping-Hepenstal PJC, Gratian MJ, Keane FM, Eady RAJ, McGrath JA, 940
Successful Treatment of Alopecia Areata-Like Hair Loss with the Contact Sensitizer Squaric Acid Dibutylester (SADBE) in C3H/HeJ Mice, Freyschmidt-Paul P, Sundberg JP, Happle R, McElwee KJ, Metz S, Boggess D, Hoffmann R, 61
Sunscreens, photo-decomposition, 547
Superantigen, in nonallergic atopic dermatitis, 628
Superoxide dismutase, in bleomycin-induced dermal sclerosis, 843
Surfactants, disruption of stratum corneum lamellae, 960
Survivin
in human skin, 415
in melanoma, 1076
Systemic sclerosis (scleroderma)
animal model, 843
type XVI collagen, 246
SZ95 immortalized human sebaceous gland cells, 1011

T

T-cell receptors (TCR)
nickel specific, 175
repertoire in melanoma, 286
T cell Stimulating Stratum Corneum Antigens: Characterization by Chromatography and Electrophoresis Indicates Limited Diversity, Hales JM, Camp RDR, 355
T Cells and T Cell-Derived Cytokines as Pathogenic Factors in the Nonallergic Form of Atopic Dermatitis, Akdis CA, Akdis M, Simon D, Dibbert B, Weber M, Gratzl S, Kreyden O, Disch R, Wüthrich B, Blaser K, Simon HU, 628
T cytotoxic type 1 cells (TC1), in psoriasis, 752
T helper cells
$CD7^-$, in cutaneous T cell lymphoma, 622
type 1 (TH1), in psoriasis, 752
T lymphocytes
dendritic epidermal, IFN-γ production, 350
in hypertrophic scars, 238
in melanoma and vitiligo-like leukoderma, 1033
in nonallergic atopic dermatitis, 628
PUVA-modulated Th1 cytokine production, 202
recirculation in skin, 410
rolipram actions, 82
stimulating antigens in stratum corneum, 355
type 1 bias, in psoriasis, 752
Tape stripping, occlusion after, 189
Tenascin, in actinic damage, 664
Tenascin-C, in allergic contact dermatitis, 906
4-Tertiary butyl phenol (4-TBP), 725
Th1 cytokines, PUVA therapy inducing, 202
Thalidomide Increases Human Keratinocyte Migration and Proliferation, Nasca MR, O'Toole EA, Palicharla P, West DP, Woodley DT, 720
Thermal sensation, topical local anesthetics and, 304
Thrombospondin 2-deficient mice, wound healing in, 782
Thromboxane, formation in mastocytosis, 93
Thymosin β4 Accelerates Wound Healing, Malinda KM, Sidhu GS, Mani H, Banaudha K, Maheshwari RK, Goldstein AL, Kleinman HK, 364
The Time-Course of Psoralen Ultraviolet A (PUVA) Erythema, Ibbotson SH, Farr PM, 346
Tissue-type plasminogen activator, in pemphigus, 22
α-Tocopherol, sebaceous gland secretion, 1006
Transcriptional Activation of Endogenous Retroviral Sequences in Human Epidermal Keratinocytes by UVB Irradiation, Hohenadl C, Germaier H, Walchner M, Hagenhofer M, Herrmann M, Stürzl M, Kind P, Hehlmann R, Erfle V, Leib-Mösch C, 587
Transdermal drug delivery, 740
Transforming growth factor-β
in arnebin-1-treated wounds, 773
receptor, hair follicle morphogenesis and, 523
Transgenic mice
amphiregulin overexpressing, 860
brain-derived neurotrophic factor, 691
CD44 antisense, 137
growth hormone, 967
MSX-2, 230
Transgenic TNF-α Causes Apoptosis in Epidermal Keratinocytes After Subcutaneous Injection of TNF-α DNA Plasmid, *Letter*, Meng X, Sawamura D, Baba T, Ina S, Itai K, Tamai K, Hanada K, Hashimoto I, 856
Transglutaminase
antibodies, in dermatitis herpetiformis, 133
in calcium-stimulated keratinocytes, 340
Transitional cells, barrier disruption and, 189
Transplantation, keratinocyte sheets, laminin 5 effects, 38

Treatment of T Lymphocytes with 8-Methoxypsoralen Plus Ultraviolet A Induces Transient but Biologically Active Th1-Skewing Cytokine Production, Tokura Y, Seo N, Yagi H, Wakita H, Moriwaki S, Furukawa F, Takigawa M, 202
Tree pollen allergens, recombinant, 830
TrkC, hair follicle development and, 425
Tropoelastin, UV radiation and IL-1α effects, 196
Tryptase, dermal–epidermal separation by, 567
Tryptophan, fluorescence in human skin, 977
Tumor cells, corticotropin-releasing hormone-secreting, 838
Tumor immunotherapy, 838, 999, 1033
Tumor necrosis factor-α (TNF-α)
in drug-induced erythema multiforme, 808
Langerhans cell co-stimulatory molecules and, 1021
Langerhans cell migration and, 541
mediating effects of UV irradiation, 196
promoter polymorphisms in psoriasis, 214
in psoriasis, 752
transgenic, inducing keratinocyte apoptosis, 856
in UVB susceptibility, 983
Tumor necrosis factor (TNF) receptor II, Langerhans cell migration and, 541
Two Ceramide Subfractions Detectable in Cer(AS) Position by HPTLC in Skin Surface Lipids of Non-Lesional Skin of Atopic Eczema, Bleck O, Abeck D, Ring J, Hoppe U, Vietzke JP, Wolber R, Brandt O, Schreiner V, 894
Two Different Mutations in the Same Codon of a Type II Hair Keratin (hHb6) in Patients with Monilethrix, Pearce EG, Smith SK, Lanigan SW, Bowden PE, 1123
Tyrosinase
autoantibodies, in vitiligo, 267
RT-PCR, detection of melanoma micrometastases, 554
Tyrosine analogs, antimelanoma action, 928
Tyrosine hydroxylase, 878

U

Ulcerative stomatitis, chronic, 146
Ultrasound, high-resolution, of skin, 821
Ultraviolet A (UVA) radiation
effects on sunscreens, 547
induced DNA damage, role of melanin, 209
modulation of epidermal cytokines, 1059
plus psoralen *see* Psoralen ultraviolet A therapy (PUVA)
riboflavin cytotoxicity, 77
Ultraviolet B (UVB) radiation
activation of endogenous retroviruses, 587
apoptosis induction in epidermal sheets, 802
effects on sunscreens, 547
immune responses in polymorphous light eruption, 4
modulation of epidermal cytokines, 1059
nerve growth factor and, 920
susceptibility genes in mice, 224
urokinase plasminogen activator receptor induction, 69
Ultraviolet (UV) radiation
fibronectin-mediated IL-10 production, 49
tryptophan fluorescence in human skin and, 977
tumor necrosis factor-α-mediated effects, 196
Uric acid, in murine stratum corneum, 1128
Urokinase plasminogen activator
in pemphigus, 22
receptor, UVB-induced expression, 69
UV Induces $p21^{WAF/CIP1}$ Protein in Keratinocytes Without p53, *Letter*, Liu M, Wikonkal NM, Brash DE, 284
UVB Increases Urokinase-Type Plasminogen Activator Receptor (uPAR) Expression, Marschall C, Lengyel E, Nobutoh T, Braungart E, Douwes K, Simon A, Magdolen V, Reuning U, Degitz K, 69

V

Vascular control mechanisms, in psoriatic plaques, 127
Vascular Endothelial Growth Factor-C (VEGF-C) and its Receptors KDR and flt-4 are Expressed in AIDS-Associated Kaposi's Sarcoma, Skobe M, Brown LF, Tognazzi K, Ganju RK, Dezube BJ, Alitalo K, Detmar M, 1047
Vasculitis, leukocytoclastic, endothelial Fc receptors, 56
Versican, in actinic damage, 664
Viscoelasticity, skin, 732
Vitamin C, Uric Acid, and Glutathione Gradients in Murine Stratum Corneum and their Susceptibility to Ozone Exposure, Weber SU, Thiele JJ, Cross CE, Packer L, 1128
Vitamin D_3, in psoriatic skin xenografts, 1082
Vitamin E
in murine stratum corneum, 1128
sebaceous gland secretion, 1006
Vitiligo
-like leukoderma, 1033
occupational, 725
tyrosinase autoantibodies, 267
Von Willebrand Factor Receptor GPIbα is Expressed by Human Factor XIIIa-Positive Dermal Dendrocytes and is Upregulated by Mast Cell Degranulation, Monteiro MR, Shapiro SS, Takafuta T, Menezes DW, Murphy GF, 272

W

Waf cyclin-dependent inhibitor, 808
Water, diffusion through stratum corneum, 533
Water Disrupts Stratum Corneum Lipid Lamellae: Damage is Similar to Surfactants, Warner RR, Boissy YL, Lilly NA, Spears MJ, McKillop K, Marshall JL, Stone KJ, 960
Wavelength-Specific Synergy Between Ultraviolet Radiation and Interleukin-1α in the Regulation of Matrix-Related Genes: Mechanistic role for Tumor Necrosis Factor-α, Werth VP, Zhang W, 196
What is the Best Way to Define the Antimelanocyte T Cell Repertoire?, *Letter*, Musette P, Bachelez H, Kourilsky P, Dubertret L, Gachelin G, 286
WM793 human melanoma cells, 935
Wnt signaling, in extramammary Paget's disease, 258
Wool follicle growth cycle, prolactin-induced, 865
Wound healing
arnebin-1 actions, 773
interleukin-18 during, 369
ischemic, PDGF-B overexpression and, 375
keratinocyte galvanotaxis, 851
nitric oxide function, 1090
thalidomide actions, 720
in thrombospondin 2-deficient mice, 782
thymosin β4 and, 364
zyxin redistribution in keratinocytes, 651

X

X-Linked Anhidrotic (Hypohidrotic) Ectodermal Dysplasia Caused by a Novel Mutation in EDA1 Gene: 406T>G (Leu55Arg), *Letter*, Martínez F, Millán JM, Orellana C, Prieto F, 285
Xenobiotic metabolism, in psoriasis, 214
Xeroderma pigmentosum
phenotype, DDB2 gene mutation, 251
type A gene-null mice, 802
Xerosis, skin ceramide levels and, 98

Zyxin Redistributes Without Upregulation in Migrating Human Keratinocytes During Wound Healing, Leccia MT, van der Gaag EJ, Jalbert NL, Byers HR, 651